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<141> 2000-02-23

<150> PCT/US99/19330

<151> 1999-08-24

<150> 60/097,917

<151> 1998-08-25

<150> 60/098,634

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<170> PatentIn Ver. 2.0

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 aagctctgtc aacctagtgg tatagttaat ctgttggcaa aaagcaaaagc agaacaacaa 3420
 aaaaaacgcaa gcaaaatcat tgccttcagg aaactatctt gtgagacaga agcttgataa 3480
 aaattcaaaa tctgcagttaa actctacttc attaatactt taaaactcac agcaataaac 3540
 cattacttag aacaagtaag cagttttctt ttcactgtgc attttgatat ttattttcaa 3600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3629

<210> 20
 <211> 1144
 <212> DNA
 <213> Homo sapiens

<400> 20
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 tatgggtcga cttgatggga aagtcatcat cctgacggcc gctgctcagg ggattggcca 180
 agcagctgcc ttagcttttg caagagaagg tgcctaaagt atagccacag acattcaatga 240

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gtccaaaactt caggaactgg aaaagtaccc ggggtattcaa actcgtgtcc ttgatgtcac 300
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tggttgctggg ttgtgtccatc acggaactgt cctggattgt gaggagaaaag actgggactt 420
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cgag 1144

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<210> 21
<211> 1443
<212> DNA
<213> Homo sapiens

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<400> 21
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tatactgtgc ttctgtgtct ggctgggtct agaattctata atcagccatc agaaaaattac 180
aattacccct caaagggtac tcaagaagcc caagcgaaaag acctgctgag aagaccattt 240
gatttaattg ttgttgtgtg tctctctctg gcaactggat ttgtgctgtt cagaggtttg 300
attgctctgg attgcccac ttgactctgc cgtattata cgaatttca agagccctat 360
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ccttactttg tgactgcact gtttggctta gttgttcttg gacttctctg gatgcctgac 480
atcacattga tacatgctgg aggtctggct caggctcagt tctctcacat tgggtgcatt 540
cttcatgcta gaactgctta ttgtctacaga gtccctgaag aagcaaaaat ccttctcttca 600
gcattaaaaa tagcatatcg agttcttctc cagctctctg cctatcgttg tatctacaaa 660
ccagagtctt tcataaaaaa aaaggcagaa gaaaaagtg aataaaaaa ttacttcatg 720
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gag 1443

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<210> 22
<211> 1053
<212> DNA
<213> Homo sapiens

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<400> 22
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gggactgggtg cggcagggggc tggggcgga ggtcgagagg gcgagkcccc tgtgtcccca 180
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ccagccccc ttccctctgccc ttctgtctggc agaggagcag ctggactggg gcccttggca 300
cagcagccgg tgtctcctgc gcccgctcc cccatggccc catgcagccc caggggcttc 360
ccccctgccc atggagtaga gcccgagatc ctggccacta tggcagtctt gacctcgcat 420
ccccctaccc cgagcccatg cagtctggga acatgccgcc tctctccag cctctgtgcc 480
tttgttccag gtgggtctcac cctccctgcc ctggctgggc taggtgggtc tgtccaggct 540
cctgcagcgc cccccccact ttgacactgg actaggatgc agcctccctt ctgtgtcccc 600
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tgtgtccctc accaccccc gccgcccagc atcctacctg gactgcggtg ctacgagggc 960
ctgcgggcct ttgtctgtgt ccaccctccc tctaagtcct tttaaaaaca tcgacgatac 1020
attgaaaaaa aaaaaaaaaa aaaggcgcg ccc 1053

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<210> 23
 <211> 741
 <212> DNA
 <213> Homo sapiens

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<400> 23
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tctagcagct gagtaaggct caggcccttag aatggcttag ctgctccat tgcaatgcat 120
catccctggat gttaaaatccc agctgtctct ctgaaamcta aatctgaaag actgagattt 180
agtcaacttt gctgagacct aactacata taataaaatg aatcatttta actgtgcagt 240
tcagtaagtt ttgaaaaatg tctatacaga ttcattgtaac tggcaccaaa attgagaaa 300
gacacttcca ccactctcaa agatctctgt tgttccctct tagtaagttc cttctacccc 360
atccctagac aacagctgat gtgctgtcat tgtacacaca tattagcttt gccctgtcct 420
gaacttcatg ttaacgggaa gcatccctgt tgtactgttc tgtgtctggc ttcttcagt 480
tatttttcaa atttatccac attgttgtgt gtatccaaaag tgtgttcttt ttcattgcca 540
aataatgttc tgcctatatg atattattaca aaatatctgt ctgtttatct attgggtggat 600
ttttgcattc gtcccagttt ggggctacta tgaataaaag tctgtgaaa attcaaaaaa 660
aaaaaaaaaa aaaatgaccc tcgagggggg gcccggwacc caaacggag tatttccctt 720
tttccccccc cccgcccccc g 741

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<210> 24
 <211> 946
 <212> DNA
 <213> Homo sapiens

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<400> 24
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tcattctccaa ggctgagatg ttgocgggtg tcccacgaga gccctgcccac gggctcaggt 180
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cggggagaggt tctggggctt tggctcacat cttcaagggc tgcctgggctt cggagcagtc 480
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agcagcaggt gcaaaagcgg tgaacacagc cctccagctg tctgagcctc agtttctctaa 720
tctgtagaat ggggatgac atacctgct cacaagaatg ttgagacaat tcacagagac 780
gttctggagc ccttctcccc cgagaccggc attcatgagt ctgctgggac cagaaaaacc 840

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atctcagggg cccagcgggg caccagggag agtctggcgg tgcaggcggc gtataaacca 900
caagcgttct ccaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 946

<210> 23
<211> 831
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

<400> 25
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cttcctggat gtgtttgtcc ctcttggctg cactggcctg ctctgctgga gacacatggg 180
cttcagaaat tggcccagtt ctgagtaaaa gttctccaag actgataaca acctgggaga 240
aagtctccagt tggtagcaat ggaggagttc cagtgggtggg ccttgtctcc agtctccttg 300
gtggtagctt tgtgggcatt gcatacttcc tcacacagcc gatttttctg aatgatctag 360
acatttctgc cccgcagtg ccaattattg catttgggtg tttagctgga ttactaggat 420
caattgtgga ctcatactta ggggctacaa tgcagtatac tgggtcggat gaaagcactg 480
gcatgggtgg caacagccca acaaaataakg caaggcacat agcagggaaa ccatttcttg 540
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cttgggggtt ttggcccagg ggggtgaact tatttcatct ccmcagggtg aaactgaatg 660
ggcagttcat gktaaaatcm cttttcatgg aaagagctct atgtaacagc ataataaaac 720
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gccgctctag aggatcccaag cttacgtacg cgtgcatgag acatcatagc t 831

<210> 26
<211> 1294
<212> DNA
<213> Homo sapiens

<400> 26
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tgcccttgc	ccatgacctt	atttagttct	cttccaacag	gggatgtttt	actgccccgt	130
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caggtttttt	ctgttctctg	tgaagccctgt	gatgatcgag	agtggctggg	actggcggga	360
cgatgttttg	gtggaagagg	gaggccatct	cgatgcgccc	cgtcccgggg	aggcaccacag	420
ccgttaagga	gggtgagtct	atctacactg	agcgcaagga	ccctgaaccg	ggggaggctg	480
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cttgcagtga	gcccagatcg	tcccactgtc	ctccagcctg	ggcgactgag	cgaaactccg	1260
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<210> 27

<211> 1656

<212> DNA

<213> Homo sapiens

<400> 27

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gtgctttccc	gcatgcctgt	gttccccccc	cacgtgtctg	ctgtctgtgt	ggaagcctgg	180
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<210> 28

<211> 1350
 <212> DNA
 <213> Homo sapiens

<400> 28

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tagctaaaact	gcctgttcta	gaaagcatct	gctttttcat	gttatctcta	aatctctctg	180
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agtcattcaga	atgttaattg	aagggtacatt	tgattttttat	ttttttacatg	tgtagttttc	420
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gctcgaaaaat	ccattcabat	gtatctgtct	acaaatgtct	ggggataact	taaaattgaa	540
acctaagtta	tatatagtct	ggcaatgctc	ttctccaata	tttacaataa	taggatgacc	600
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<210> 29
 <211> 1766
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1743)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1748)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1749)
 <223> n equals a,t,g, or c

<400> 29

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<211> 2790

<212> DNA

<213> Homo sapiens

<400> 30

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 <211> 1417
 <212> DNA
 <213> Homo sapiens

<400> 31						
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<210> 32
 <211> 1906
 <212> DNA
 <213> Homo sapiens

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<222> (617)
 <223> n equals a,t,g, or c

<220>
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 <223> n equals a,t,g, or c

<220>
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 <223> n equals a,t,g, or c

<220>
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 <222> (1901)
 <223> n equals a,t,g, or c

<400> 32

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 <211> 543
 <212> DNA
 <213> Homo sapiens

<220>

<221> SITE
 <222> (367)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (376)
 <223> n equals a,t,g, or c

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<210> 34
 <211> 1452
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (283)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (596)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (607)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1275)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1284)
 <223> n equals a,t,g, or c

<400> 34
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005498 0430
 005498 0430

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<210> 35
 <211> 2908
 <212> DNA
 <213> Homo sapiens

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 <221> SITE
 <222> (1653)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1655)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (2850)
 <223> n equals a,t,g, or c

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<210> 36
 <211> 953
 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

<400> 37

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<211> 1411
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<210> 19

<211> 1182

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<223> n equals a,t,g, or c

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<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 3465

<212> DNA

<213> Homo sapiens

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<211> 1237

<212> DNA

<213> Homo sapiens

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 <212> DNA
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 <223> n equals a,t,g, or c

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 <212> DNA
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<212> DNA

<213> Homo sapiens

<400> 54

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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 <223> n equals a,t,g, or c

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<400> 57

<210> 58

<212> DNA

<213> Home

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221-222

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<223> n equals a, t, g, or c

 $\langle 220 \rangle$

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<222> (39)

<223> n equals a, t, g, or c

<220>

<221> SITE

<222> (40)

<223> n equals a, t, g, or c

<400> 58

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gccaaagccct	gcctctgtac	agcctcgagt	ggacagccag	agggcaccgag	ggagcccaga	120
gcccagaatg	gagccccagc	tggggccctga	ggctgcccgc	ctccgccctg	gctggctggc	180
ccctgctgctg	tgggtctcag	ccctgagctg	ttctttctcc	tggccagctt	cttccctctc	240
ttctctggtg	ccccaaagtc	gaaccagcta	caattttgga	aggactttcc	tgggtcttga	300
taaatgcaat	gcctgcacgc	ggacatctat	tugcaagaag	ttctttaaag	aagaaaatag	360
atctgacaa	tgggttggct	cccaccttgg	actgcctccc	gattccttgc	cttcttatcc	420
tgcaaatctac	tcagatgatt	ccaaaatctg	gcgcctcttg	gagatcttta	gactggctag	480
caaatattcaa	aacgagatcc	cagacaggaa	aatctgtgcc	tctgcattag	ccccaaagac	540
ctgcagcatt	gagcgtgtcc	tgcggaaaac	agagaggctc	cagaaaatggc	tgcaggccaa	600
gcgcctcacg	ccggacctgg	tgcaggactg	tcaccagggc	cagagagAAC	tAAgttccct	660
gtgtatgctg	agataaacacc	agtgaaaaaag	cctggccatgg	agcccagcac	tgagaacctc	720
cagaaaagtgt	tagccttctc	ccaactgtgt	tataccaacc	acattttcaa	atagttaattc	780
ttaaaggaggc	ttctgcattc	aaccttcaca	tgcagctccc	atgccacctc	cagaattcac	840
caacacacag	gcccaccagc	aacagggtacc	tttgcacaa	attttttgat	gacaattccaa	900
agccccggct	ctttcccacc	acactgtggc	cccctagatg	gggctgtctg	tgagcccacc	960
ccaatcccg	actgtatccc	ccctgtgtatc	tacttccctgg	caagatctcct	ccagtccttg	1020
acaggtctctc	cctatcagat	agaacctgat	aaggagctag	gcgaattctg	acaacattac	1080

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<210> 59
<211> 593
<212> DNA
<213> Homo sapiens
```

```
<210> 60
<211> 496
<212> DNA
<213> Homo sapiens
```

```
<210> 61
<211> 1292
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (697)
<223> n equals a,t,g, or c
```

<220>
 <221> SITE
 <222> (1280)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1287)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1291)
 <223> n equals a,t,g, or c

<400> 61
 aaacotcttc tataggtaaa.gctgggtacgc ctgcaggtac cgggtccggaa ttccccgggtc 60
 gacccacgcg nccggaaaga ggaaacatag aggtgccaaa ggaacaaaga cataatgatg 120
 tcatccaagc caacaagcca tgctgaagta aatgaaacca taccacaacc ttaccaccaca 180
 agcagcttta tggctcctgg atttcaacag cctctgggtt caatcaactt agaaaaaccaa 240
 gctcagggtg cttagcgtgc tcagccctac ggcattcacat ctccgggaat ctttgcctagc 300
 agtcaaccgg gtcaaggaaa tatacaaatg ataaatccaa gtgtgggaac agcagtaatg 360
 aactctaaag aagaagcaaa ggcactaggg gtgatccaga tcatgggttg actgatgcac 420
 attggtttct gaattgtttt gtgtcttaata tccctctctt tttagagaagt attaggttct 480
 gctctactcg ctgktatttg tggataccca tcttgggttg gcctttcttt tattatctct 540
 ggctctctct ctgtgtcagc atccaaggag ctttccctgt gtctggtgaa aggcagcctg 600
 ggaatgaaca ttggtaggtc tatcttggcc ttcatgtgag tgattctgct gctgggtggat 660
 atgtgcattc atgggggtatc tggccaagac tactggmccg tgccttcttg aaaaggcatt 720
 tcagccacgc tgatgatctt ctccytcttg gagtctcttg tagcttctgc cacagcccat 780
 tttgccaacc aagcaaacac cacaaaccaat atgtctgtcc tggttattcc aaatatgtat 840
 gaaagcaacc ctgkgacacc agcgtctatt tcagctctct ccagatgcaa caactactca 900
 gctaactgcc ctaaaaagaaa aagggggtatc agtctaactt catggagaaa aactacttgc 960
 aaaaaacttt taagaagatg tcttttactg tctacaatga tttctagtct ttaaaaaactg 1020
 tgtttgagat ttgtttttag gttgggtcgt aatgatggct gtactctccc tcaactgtctc 1080
 ttcttacatt accactacta catgctggca aaggtgaagg atcagaggac tgaaaaatga 1140
 ttctgcaact cttctaaagt tagaaatgtt tctgttcata ttactttttc cttaataaaaa 1200
 tgtcattaga aacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggc ggccgcctcta 1260
 gaggatccaa gcttacgtan gcgtgcnctgc na 1292

<210> 62
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 62
 cccccctggc cccccatta atgccatggg ttgggaggag cckgatcccc tgaaccccat 60
 atttaacctc tactgcccms ggaaatgcc tacattactt tccctaatt ggaagtataa 120
 ttagagtgat gttggtaggg tagaaaaaga gggagtcact tgatgctttc aggttaacca 180
 gagctatggg tgctacaggc ttgtctttct aagtgacata tctttacctt attctcagac 240
 caggttttga aagmtwtggg ggtctcttta gattttaatc cctactttct ttacgggtaca 300
 aatatgtaca aaagaaaaag gtcttatatt cttttacaca aattttataa taaattttga 360
 actcctttctg tttaaaaaaa aaaaaaaaaa aaaaaaaaaa 398

<210> 63
 <211> 1202
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (282)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (596)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (607)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (1200)
 <223> n equals a,t,g, or c

<400> 63

gaattcggca	cgagactaag	ttgtgcactt	taattgggtg	aattgtacat	gtragttata	60
tatctractg	tagttgtwat	taaaaaacia	caggaggcca	tgtgggctgc	taggagtagc	120
aattgtctgty	cccagccagc	aggtagagac	cagggtctga	cagagkagta	tgggctgtgc	180
tgcagattat	ttgtgggtacc	caactgtctg	ataaaacag	gtgtgatctc	ttgcattgct	240
atgcacgagt	ggattccccag	taaatgtgtg	cagggtgcct	gnatgatgtg	tggcttgtgc	300
tttggatcgt	aattgcttacc	tatgctactt	aagtacata	ccctgtggcc	tttgtggcca	360
ggactgtggg	ctactacctg	kagtgtattc	ttaggggaaa	ggacccacag	ccctgtgcagg	420
aggaaaaaag	catctctgag	tacaggggtg	atgagctgga	tgagctgccc	ggcaagagcc	480
acgcacaccc	agggtggtgag	tcttaaggat	aagggtggaat	tggcccccata	gctgtccctgg	540
acagaaactg	cccagagaag	aatgaatgga	ggacacaggg	ctctgtgggtc	ccacccntttt	600
ttggganacc	tgtgactggg	cctgtttacca	tgtcaactta	gccccaaaacc	catctctgat	660
tgacttgggt	gcttattttt	gcacattctt	gtccacacac	gccacataca	tactgggtgc	720
tcctcsaagg	ccaggcagat	gcagcagctg	ttggggccasc	aaagargaar	gtcctgggaar	780
gttctgggct	gaacgctgca	tctgtttgtg	gacagccaca	actgctcagg	cttcccttgtc	840
tgtgggtgca	ctgtggggag	gagtgttatg	ataagaacat	tggctctcag	tcttccctgg	900
ggagaagtgt	ggcctcacgt	gggatttggg	cggttgcctt	agggaaggctc	tctgcacgtc	960
tagttccagt	ttgtactggg	aagaattaaa	aaagtctgcc	agcttcttta	gtttgtccctg	1020
tcttttbtga	tgattctttt	tgagatcccc	tcctatcagc	tcaggagtgg	gactttcttgg	1080
agaaggaaaag	tgttttttcc	gttccctcact	gtccaccttg	gggcatttcag	gaacatggggc	1140
ctgatgaatt	tgtctgaagg	cagtctgtaa	tcccatcact	ttggggagcca	aagaggcggn	1200
ca						1202

<210> 64
 <211> 1517
 <212> DNA
 <213> Homo sapiens

<400> 64

gattacgcca	actcgaattt	aaccttcact	aaagggaaca	aaagctggag	ctccaccgct	60
gtggcgggcc	ctctagaact	agtggatccc	ccgggctgca	ggaaatcggc	acgagggagc	120
ccagagccca	agatggagcc	ccagctgggg	cctgagggct	ccgcccctcc	ccctgggtgg	180
ctggccctgc	tgtgtgtggg	ctcagccctg	agctgttctt	tctccttggc	agcttcttcc	240
ctttcttctc	tgggtgcccc	agtcagaacc	agctacaatt	ttggaaggac	tttccctggg	300
cttgacaaat	gcaatgcctg	catcgggaca	tctatttgca	agaagtcttt	ttaaagaaaga	360
aataagatct	gacaactggc	tggcttccca	cctcgggact	gcctcccgat	tcccttggct	420
tcttatccct	gcaaatctact	caggatgatt	ccaaaaatct	gcgcccctgt	gagatcttta	480

```

gactgggtcag caaatatcaa aacgagatct cagacaggaa aatctgtgcc tctgcatcag      540
ccccaaagac ctgcagcatt gagcgtgtcc tgcggaaaac agagagggtc cagaaatggc      600
tgcaggccaa gcgcctcacg ccggacctgg tgcaggactg tcaccagggc cagagagaac      660
taaagtccct gtgtatgctg gagataaacac cagtgaaaaa gcccttggcat ggagccccag      720
cactgagaac ttcagaaaag tgttagcctt ctcccaactg tgttatacca accacatttc      780
caaatagtaa tcattaaaga ggcttctgca tcaaaccttc acatgcagct cccatgccac      840
cctccagaat tcaccaacac acaggcccac cagcaacagg ctacctttt gcacaattt      900
ttttgatgac aatccaaagc cccggctctt tcccaccaca ctgtggtccc ctagatgggg      960
ctgttgctga gcccaaccca atcccagatg tgatccccct gtgactact tctggggccaa     1020
gattctccag tctggacagg tcttccctta tgagatagaa cctgataagg agctaggcca     1080
attctgacaa cattaccaaa ggcccacata acttctaaat tttggctctg tctgaaggaa     1140
aacctgttct tgccttagtg atggaatgaac tctcttacct ctggcttcta gagggaaaaa     1200
aaagcatacc tcttttactt tcttaagtacc tccatcagag tcatgaaatc acctgtcaag     1260
actatctatc ttttatgttt ccattcttgt aagaactctt taaatgagga cactgctgat     1320
tgctgggtgac gtctttctgag caaacactcg ggggtatgga tgaaagccaa tgcaggtca     1380
aatgactcct tggggaaagt acttctcttc tattcagatt tcaactaaaat ctccaagat     1440
gaaagcaaaa aaaaaaaaaa aaaaaaaaaa actcgagggg gggcccgtag ccaattcgcc     1500
ctatagttag tctgatt

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<210> 65
<211> 526
<212> DNA
<213> Homo sapiens

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<220>
<221> SITE
<222> (66)
<223> n equals a,t,g, or c

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<220>
<221> SITE
<222> (106)
<223> n equals a,t,g, or c

```

```

<220>
<221> SITE
<222> (484)
<223> n equals a,t,g, or c

```

```

<400> 65
ctctgacagc ttcctctttg gccaaagccct gcctctgtac agcctcgagt ggacagccag      60
aggctcnagac tggagcccag agcccaagat ggagccccag ctgggncctg aggcctggccgc     120
cctccgccct ggctggctgg ccttgtgtgt gtgggtctca gccctgagct gtbctctctc     180
cttgccagct tcttcccttt ctctcttggt gccccaagtc agaaccagct acaattcttg     240
aaggactttc ctcggtcttg ataaatgcaa tgccctgcac gggacatcta ttctgcaagaa     300
gttcttttaa gaagaaataa gatctgacaa ctggctgggt tcccaccttg ggactgcctc     360
ccgattccct ttgstttctt atcccttgcaa attactccar atgacttycca aaatctggsq     420
sccttctgga ratcttttaa ctggtcagca awtwtcaaac gaaatctcca aacaggaaat     480
cttntgcctc ctgcatccac ccccaaagaa ctgacacatt gacgtc      526

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```

<210> 66
<211> 664
<212> DNA
<213> Homo sapiens

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<220>
<221> SITE

```

<222> (31)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (53)
 <223> n equals a,t,g, or c

<400> 66
 caggctctca atacggactc actcataggg naaagctggg acgcttcag gtaccgggtcc 60
 ggnaattccc gggctcgacc acgcgtcgcr gagctcttac ttctccagca acrcctctca 120
 gtacataata agcttaactg ataaacagaa tatttagaaa ggtgagactt gggcttacca 180
 ttgggtttta atcatagggg cctagggcga gggttcaggg cttctcttga gcagataattg 240
 tcaagttcat ggccttaggt agcatgtatc tgggtcttaac tctgattgta gcaaaaagttc 300
 tgagaggagc tgagccctgt tgtggcccat taaagaacag ggtcctcagg ccttgcccgc 360
 ttctgttcca ctgccccctc cccatcccca gccagccga gggaatcccg tgggttgctt 420
 acctacctat aagggtggttc ataagctgct gtcctggcca ctgcattcaa attccaatgt 480
 gtacttcata gtgtaaaaat ttatattatt gtgaggtttc ttgtcttttc tttttctttt 540
 ttttttggtt tattgctgta tctactttaa cttccagaaa taaacgttat atrggaaaaa 600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 660
 aaaa 664

<210> 67
 <211> 156
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (156)
 <223> Kaa equals stop translation

<400> 67
 Met Arg Leu Trp Lys Ala Val Val Val Thr Leu Ala Phe Met Ser Val
 1 5 10 15
 Asp Ile Cys Val Thr Thr Ala Ile Tyr Val Phe Ser His Leu Asp Arg
 20 25 30
 Ser Leu Leu Glu Asp Ile Arg His Phe Asn Ile Phe Asp Ser Val Leu
 35 40 45
 Asp Leu Trp Ala Ala Cys Leu Tyr Arg Ser Cys Leu Leu Leu Gly Ser
 50 55 60
 His His Trp Cys Gly Gln Glu Gln Cys Ala Gly Ala Pro Ala Ala Ala
 65 70 75 80
 Gly Leu Val Ala Gly His His Pro Arg Val Pro Leu Arg Gly His Leu
 85 90 95
 Cys His Gly Glu Ala Ala Ala Leu Leu Arg Gly Ala Gln Ala His Pro
 100 105 110
 Gly Pro Leu Val Leu Gly Pro Val Arg Val Asp Val His Phe Thr Arg
 115 120 125
 Arg Ile Leu Pro Ala Leu Val Ala Ala Val His Arg Ala Ala Arg His

0054988 01502

130

135

140

Pro Gly Pro Gly Ala Arg Gly Gly His Arg Gly Xaa
 145 150 155

<210> 68
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (70)
 <223> Xaa equals stop translation

<400> 68
 Met Ala Ala Arg His Leu Pro Gly Phe His Thr Tyr Thr Asn Leu Leu
 1 5 10 15
 Phe Leu Leu Leu Pro Ser Leu Leu Met Gly Tyr Ser Glu Ser Pro Pro
 20 25 30
 Pro Ile Thr Asp Ser Trp Ala Pro Phe Ile Ser Leu Thr His His Val
 35 40 45
 Leu Ser Gln Ser Gln Ser Pro Leu Ser Ser Asn Cys Trp Ile Cys Leu
 50 55 60
 Ser Thr His Thr Gln Xaa
 65 70

<210> 69
 <211> 502
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (502)
 <223> Xaa equals stop translation

<400> 69
 Met Trp Lys Leu Trp Arg Ala Glu Glu Gly Ala Ala Ala Leu Gly Gly
 1 5 10 15
 Ala Leu Phe Leu Leu Leu Phe Ala Leu Gly Val Arg Gln Leu Leu Lys
 20 25 30
 Gln Arg Arg Pro Met Gly Phe Pro Pro Gly Pro Pro Gly Leu Pro Phe
 35 40 45
 Ile Gly Asn Ile Tyr Ser Leu Ala Ala Ser Ser Glu Leu Pro His Val
 50 55 60
 Tyr Met Arg Lys Gln Ser Gln Val Tyr Gly Glu Ile Phe Ser Leu Asp
 65 70 75 80

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Leu Gly Gly Ile Ser Thr Val Val Leu Asn Gly Tyr Asp Val Val Lys
 85 90 95
 Glu Cys Leu Val His Gln Ser Glu Ile Phe Ala Asp Arg Pro Cys Leu
 100 105 110
 Pro Leu Phe Met Lys Met Thr Lys Met Gly Gly Leu Leu Asn Ser Arg
 115 120 125
 Tyr Gly Arg Gly Trp Val Asp His Arg Arg Leu Ala Val Asn Ser Phe
 130 135 140
 Arg Tyr Phe Gly Tyr Gly Gln Lys Ser Phe Glu Ser Lys Ile Leu Glu
 145 150 155 160
 Glu Thr Lys Phe Phe Asn Asp Ala Ile Glu Thr Tyr Lys Gly Arg Pro
 165 170 175
 Phe Asp Phe Lys Gln Leu Ile Thr Asn Ala Val Ser Asn Ile Thr Asn
 180 185 190
 Leu Ile Ile Phe Gly Glu Arg Phe Thr Tyr Glu Asp Thr Asp Phe Gln
 195 200 205
 His Met Ile Glu Leu Phe Ser Glu Asn Val Glu Leu Ala Ala Ser Ala
 210 215 220
 Ser Val Phe Leu Tyr Asn Ala Phe Pro Trp Ile Gly Ile Leu Pro Phe
 225 230 235 240
 Gly Lys His Gln Gln Leu Phe Arg Asn Ala Ala Val Val Tyr Asp Phe
 245 250 255
 Leu Ser Arg Leu Ile Glu Lys Ala Ser Val Asn Arg Lys Pro Gln Leu
 260 265 270
 Pro Gln His Phe Val Asp Ala Tyr Leu Asp Glu Met Asp Gln Gly Lys
 275 280 285
 Asn Asp Pro Ser Ser Thr Phe Ser Lys Glu Asn Leu Ile Phe Ser Val
 290 295 300
 Gly Glu Leu Ile Ile Ala Gly Thr Glu Thr Thr Thr Asn Val Leu Arg
 305 310 315 320
 Trp Ala Ile Leu Phe Met Ala Leu Tyr Pro Asn Ile Gln Gly Gln Val
 325 330 335
 Gln Lys Glu Ile Asp Leu Ile Met Gly Pro Asn Gly Lys Pro Ser Trp
 340 345 350
 Asp Asp Lys Cys Lys Met Pro Tyr Thr Glu Ala Val Leu His Glu Val
 355 360 365
 Leu Arg Phe Cys Asn Ile Val Pro Leu Gly Ile Phe His Ala Thr Ser
 370 375 380
 Glu Asp Ala Val Val Arg Gly Tyr Ser Ile Pro Lys Gly Thr Thr Val
 385 390 395 400

10054580 012506

Ile Thr Asn Leu Tyr Ser Val His Phe Asp Glu Lys Tyr Trp Arg Asp
 405 410 415

Pro Glu Val Phe His Pro Glu Arg Phe Leu Asp Ser Ser Gly Tyr Phe
 420 425 430

Ala Lys Lys Glu Ala Leu Val Pro Phe Ser Leu Gly Arg Arg His Cys
 435 440 445

Leu Gly Glu His Leu Ala Arg Met Glu Met Phe Leu Phe Phe Thr Ala
 450 455 460

Leu Leu Gln Arg Phe His Leu His Phe Pro His Glu Leu Val Pro Asp
 465 470 475 480

Leu Lys Pro Arg Leu Gly Met Thr Leu Gln Pro Gln Pro Tyr Leu Ile
 485 490 495

Cys Ala Glu Arg Arg Kaa
 500

<210> 70
 <211> 189
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (85)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (104)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (164)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (189)
 <223> Kaa equals stop translation

<400> 70
 Met Arg Pro Ala Phe Ala Leu Cys Leu Leu Trp Gln Ala Leu Trp Pro
 1 5 10 15

Gly Pro Gly Gly Gly Glu His Pro Thr Ala Asp Arg Ala Gly Cys Ser
 20 25 30

Ala Ser Gly Ala Cys Tyr Ser Leu His His Ala Thr Met Lys Arg Gln
 35 40 45

Ala Ala Glu Glu Ala Cys Ile Leu Arg Gly Gly Ala Leu Ser Thr Val

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50 55 60
 Arg Ala Gly Ala Glu Leu Arg Ala Val Leu Ala Leu Leu Arg Ala Gly
 65 70 75 80
 Pro Gly Pro Gly Xaa Gly Ser Lys Asp Leu Leu Phe Trp Val Ala Leu
 85 90 95
 Glu Arg Arg Arg Ser His Cys Xaa Leu Glu Asn Glu Pro Leu Arg Gly
 100 105 110
 Phe Ser Trp Leu Ser Ser Asp Pro Gly Gly Leu Glu Ser Asp Thr Leu
 115 120 125
 Gln Trp Val Glu Glu Pro Gln Arg Ser Cys Thr Ala Arg Arg Trp Val
 130 135 140
 Leu Pro Gly His Arg Trp Gly Arg Ala Arg Ser Trp Lys Glu Met Arg
 145 150 155 160
 Cys His Leu Xaa Ala Asn Ala Thr Cys Ala Ser Thr Ser Leu Arg Ser
 165 170 175
 Cys Val Leu Arg Arg Ala Pro Gly Pro Pro Leu Thr Xaa
 180 185

 <210> 71
 <211> 486
 <212> PRT
 <213> Homo sapiens

 <400> 71
 Met Gln Pro Ser Gly Leu Glu Gly Pro Gly Thr Phe Gly Arg Trp Pro
 1 5 10 15
 Leu Leu Ser Leu Leu Leu Leu Leu Leu Leu Gln Pro Val Thr Cys
 20 25 30
 Ala Tyr Thr Thr Pro Gly Pro Pro Arg Ala Leu Thr Thr Leu Gly Ala
 35 40 45
 Pro Arg Ala His Thr Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu
 50 55 60
 Ser Ser Pro Ser Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met
 65 70 75 80
 Arg Asp Phe Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu
 85 90 95
 Arg Gln Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe
 100 105 110
 Ser Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly
 115 120 125
 Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg Asp
 130 135 140

2054988 8864500F

Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg Met Cys
 145 150 155 160
 Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys Ala Leu Asn
 165 170 175
 Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu Gly Gly His Ser
 180 185 190
 Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe Tyr Met Leu Gly Val
 195 200 205
 Arg Tyr Leu Thr Leu Thr His Thr Cys Asn Thr Pro Trp Ala Glu Ser
 210 215 220
 Ser Ala Lys Gly Val His Ser Phe Tyr Asn Asn Ile Ser Gly Leu Thr
 225 230 235 240
 Asp Phe Gly Glu Lys Val Val Ala Glu Met Asn Arg Leu Gly Met Met
 245 250 255
 Val Asp Leu Ser His Val Ser Asp Ala Val Ala Arg Arg Ala Leu Glu
 260 265 270
 Val Ser Gln Ala Pro Val Ile Phe Ser His Ser Ala Ala Arg Gly Val
 275 280 285
 Cys Asn Ser Ala Arg Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys
 290 295 300
 Lys Asn Gly Gly Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln
 305 310 315 320
 Cys Asn Pro Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His
 325 330 335
 Ile Lys Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr
 340 345 350
 Asp Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr
 355 360 365
 Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu Glu
 370 375 380
 Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg Gln Val
 385 390 395 400
 Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu Glu Asp Lys
 405 410 415
 Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser Asp Leu Ser Arg
 420 425 430
 Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln Glu Leu Thr Glu Ile
 435 440 445
 Pro Ile His Trp Thr Ala Lys Leu Pro Ala Lys Trp Ser Val Ser Glu

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 20054938 012502

450

455

460

Ser Ser Pro His Met Ala Pro Val Leu Ala Val Val Ala Thr Phe Pro
 465 470 475 480

Val Leu Ile Leu Trp Leu
 485

<210> 72
 <211> 88
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (88)
 <223> Xaa equals stop translation

<400> 72
 Met Val Ala Ser Gly Trp Leu Leu Leu Ala Gln Ala Ser Phe Leu Pro
 1 5 10 15
 Leu Ala Pro Pro Gly Ala Leu Gly Ala Gly Cys Trp Met Asp Gly Arg
 20 25 30
 Pro Leu Ala Pro Pro Gly Ala Leu Gly Ala Gly Cys Trp Met Gly Gly
 35 40 45
 Arg Pro Leu Ala Pro Pro Gly Ala Leu Gly Ala Gly Cys Trp Met Gly
 50 55 60
 Gly Arg His Gly Ala Pro Leu Leu Gly Cys Leu Cys Pro Ser Gly Leu
 65 70 75 80
 Cys Ser Ser Tyr Val Cys Leu Xaa
 85

<210> 73
 <211> 299
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (167)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 73
 Met Met Ser Ser Lys Pro Thr Ser His Ala Glu Val Asn Glu Thr Ile
 1 5 10 15
 Pro Asn Pro Tyr Pro Pro Ser Ser Phe Met Ala Pro Gly Phe Gln Gln
 20 25 30
 Pro Leu Gly Ser Ile Asn Leu Glu Asn Gln Ala Gln Gly Ala Gln Arg
 35 40 45

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Ala Gln Pro Tyr Gly Ile Thr Ser Pro Gly Ile Phe Ala Ser Ser Gln
 50 55 60
 Pro Gly Gln Gly Asn Ile Gln Met Ile Asn Pro Ser Val Gly Thr Ala
 65 70 75 80
 Val Met Asn Phe Lys Glu Glu Ala Lys Ala Leu Gly Val Ile Gln Ile
 85 90 95
 Met Val Gly Leu Met His Ile Gly Phe Gly Ile Val Leu Cys Leu Ile
 100 105 110
 Ser Phe Ser Phe Arg Glu Val Leu Gly Phe Ala Ser Thr Ala Val Ile
 115 120 125
 Gly Gly Tyr Pro Phe Trp Gly Gly Leu Ser Phe Ile Ile Ser Gly Ser
 130 135 140
 Leu Ser Val Ser Ala Ser Lys Glu Leu Ser Arg Cys Leu Val Lys Gly
 145 150 155 160
 Ser Leu Gly Met Asn Ile Xaa Ser Ser Ile Leu Ala Phe Ile Gly Val
 165 170 175
 Ile Leu Leu Leu Val Asp Met Cys Ile Asn Gly Val Ala Gly Gln Asp
 180 185 190
 Tyr Trp Ala Val Leu Ser Gly Lys Gly Ile Ser Ala Thr Leu Met Ile
 195 200 205
 Phe Ser Leu Leu Glu Phe Phe Val Ala Cys Ala Thr Ala His Phe Ala
 210 215 220
 Asn Gln Ala Asn Thr Thr Thr Asn Met Ser Val Leu Val Ile Pro Asn
 225 230 235 240
 Met Tyr Glu Ser Asn Pro Val Thr Pro Ala Ser Ser Ser Ala Pro Pro
 245 250 255
 Arg Cys Asn Asn Tyr Ser Ala Asn Ala Pro Lys Arg Lys Arg Gly Ile
 260 265 270
 Ser Leu Ile Ser Trp Arg Lys Thr Thr Cys Lys Asn Phe Leu Arg Arg
 275 280 285
 Cys Leu Leu Leu Ser Thr Met Ile Ser Ser Leu
 290 295

<210> 74

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals stop translation

10054988-012502

<400> 74

Met Ala Leu His Pro Gly Ser Ser His Leu Leu Val Ala Val Pro Val
 1 5 10 15

Ser Trp Phe Leu Phe Cys Ile Pro Gly Ile Ser Phe Ile Thr Leu Ser
 20 25 30

Trp Ser Tyr Gln Glu Ser Pro Val Ser Phe Leu Ser Val Glu Gly Xaa
 35 40 45

<210> 75

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals stop translation

<400> 75

Met Tyr Ser Leu Phe Leu Thr Cys Ile Phe Pro Phe Thr Leu Cys His
 1 5 10 15

Lys Lys Ile Leu Met Val Ile His Asp Phe Thr Gly Pro Val His Val
 20 25 30

Phe Pro Glu Lys Thr Val Leu Glu Trp Asn Tyr Xaa
 35 40

<210> 76

<211> 140

<212> PRT

<213> Homo sapiens

<400> 76

Met Cys Ala Met Tyr Leu Met Ile Lys Ala Phe Leu Pro Lys Met Leu
 1 5 10 15

Ala Gln Lys Ser Gly Asn Ile Ile Asn Met Ser Ser Val Ala Ser Ser
 20 25 30

Val Lys Gly Val Val Asn Arg Cys Val Tyr Ser Thr Thr Lys Ala Ala
 35 40 45

Val Ile Gly Leu Thr Lys Ser Val Ala Ala Asp Phe Ile Gln Gln Gly
 50 55 60

Ile Arg Cys Asn Cys Val Cys Pro Gly Thr Val Asp Thr Pro Ser Leu
 65 70 75 80

Gln Glu Arg Ile Gln Ala Arg Gly Asn Pro Glu Glu Ala Arg Asn Asp
 85 90 95

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Phe Leu Lys Arg Gln Lys Thr Gly Arg Phe Ala Thr Ala Glu Glu Ile
 100 105 110

Ala Met Leu Cys Val Tyr Leu Ala Ser Asp Glu Ser Ala Tyr Val Thr
 115 120 125

Gly Asn Pro Val Ile Ile Asp Gly Gly Trp Ser Leu
 130 135 140

<210> 77

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (153)

<223> Xaa equals stop translation

<400> 77

Met Leu Val Val Cys Leu Leu Leu Ala Thr Gly Phe Cys Leu Phe Arg
 1 5 10 15

Gly Leu Ile Ala Leu Asp Cys Pro Ser Glu Leu Cys Arg Leu Tyr Thr
 20 25 30

Gln Phe Gln Glu Pro Tyr Leu Lys Asp Pro Ala Ala Tyr Pro Lys Ile
 35 40 45

Gln Met Leu Ala Tyr Met Phe Tyr Ser Val Pro Tyr Phe Val Thr Ala
 50 55 60

Leu Tyr Gly Leu Val Val Pro Gly Cys Ser Trp Met Pro Asp Ile Thr
 65 70 75 80

Leu Ile His Ala Gly Gly Leu Ala Gln Ala Gln Phe Ser His Ile Gly
 85 90 95

Ala Ser Leu His Ala Arg Thr Ala Tyr Val Tyr Arg Val Pro Glu Glu
 100 105 110

Ala Lys Ile Leu Phe Leu Ala Leu Asn Ile Ala Tyr Gly Val Leu Pro
 115 120 125

Gln Leu Leu Ala Tyr Arg Cys Ile Tyr Lys Pro Glu Phe Phe Ile Lys
 130 135 140

Thr Lys Ala Glu Glu Lys Val Glu Xaa
 145 150

<210> 78

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

005453 0136

<222> (48)

<223> Kaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (180)

<223> Kaa equals stop translation

<400> 78

Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Leu
1 5 10 15

Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala
20 25 30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Kaa
35 40 45

Pro Val Ser Ser Ala Ile Pro Arg Arg Val Cys Trp Ser Leu Leu Ser
50 55 60

Pro Arg Pro Thr Arg Pro Pro Gly Pro Ala Pro Cys Pro Leu Pro Ser
65 70 75 80

Ala Gly Arg Gly Ala Ala Gly Leu Gly Pro Leu Ala Gln Gln Pro Val
85 90 95

Ser Pro Ala Pro Ala Ser Pro Met Ala Pro Cys Ser Pro Arg Gly Phe
100 105 110

Pro Pro Ala His Gly Val Glu Pro Glu Ile Leu Ala Thr Met Pro Val
115 120 125

Leu Thr Ser His Pro Pro Thr Pro Ser Pro Cys Ser Leu Gly Thr Cys
130 135 140

Arg Leu Leu Ser Ser Leu Cys Ala Phe Val Pro Gly Gly Leu Thr Leu
145 150 155 160

Leu Ser Leu Ala Gly Leu Gly Gly Pro Val Gln Ala Pro Ala Ala Pro
165 170 175

Pro Ser Leu Kaa
180

<210> 79

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (70)

<223> Kaa equals stop translation

<400> 79

Met Leu Met Gly Ser Ile Leu Tyr Val Leu Phe Cys Val Trp Leu Leu
1 5 10 15

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Gln Cys Ile Phe Glu Ile Tyr Pro His Cys Cys Val Tyr Pro Lys Cys
20 25 30

Val Leu Phe His Cys Gln Ile Met Phe Cys Tyr Met Asn Ile Leu Gln
35 40 45

Asn Ile Cys Leu Phe Ile Tyr Trp Trp Ile Phe Ala Phe Val Pro Val
50 55 60

Trp Gly Tyr Tyr Glu Xaa
65 70

<210> 80

<211> 191

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (191)

<223> Xaa equals stop translation

<400> 80

Met Arg Ala Cys Pro Trp Ala Gln Val Pro Leu Tyr Leu Leu Leu Asp
1 5 10 15

Gly His Leu Ala Val Ser Gln Ala Gly Val Met Ala Gly Val Ser Gly
20 25 30

Gly Arg Gly Gly Arg Arg Leu Arg Gly Pro Ile Thr Ser Arg Val Ile
35 40 45

Thr Ser Cys Gln Gln Pro Gly Val Gly Val Trp Val Ser Leu Arg Pro
50 55 60

Glu Leu Leu Asn Leu Glu Ser Leu Gly Val Ala Ala Lys Gly Val Tyr
65 70 75 80

Asp Lys His Val Ser Leu Asp Ile Ser Gly Glu Arg Ser Gly Ala Leu
85 90 95

Val Thr Phe Ser Lys Gly Cys Trp Ala Ser Glu Gln Ser Pro Pro Met
100 105 110

Ser Gln Pro Leu Gln Gly Pro Ser Leu Ser Leu His Pro Arg Pro Ser
115 120 125

Ala Ala Leu Val Met Ser Arg Arg Lys Val Leu Gly Cys Ala Gln Ser
130 135 140

Gln Glu Ser Lys Ile Cys Gln Ala Lys Ala Pro Gly Lys Ser Arg Arg
145 150 155 160

Ser Leu Gly Trp Pro Pro Gly Cys Gly Ala Ala Arg Ala Lys Thr Val
165 170 175

Asn Thr Ala Leu Gln Leu Ser Glu Pro Gln Phe Ser Asn Leu Xaa

005498 01300

180

183

190

<210> 81
 <211> 166
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (127)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (166)
 <223> Xaa equals stop translation

<400> 81
 Met Cys Leu Ser Leu Leu Ala Ala Leu Ala Cys Ser Ala Gly Asp Thr ..
 1 5 10 15
 Trp Ala Ser Glu Val Gly Pro Val Leu Ser Lys Ser Ser Pro Arg Leu
 20 25 30
 Ile Thr Thr Trp Glu Lys Val Pro Val Gly Thr Asn Gly Gly Val Thr
 35 40 45
 Val Val Gly Leu Val Ser Ser Leu Leu Gly Gly Thr Phe Val Gly Ile
 50 55 60
 Ala Tyr Phe Leu Thr Gln Leu Ile Phe Val Asn Asp Leu Asp Ile Ser
 65 70 75 80
 Ala Pro Gln Trp Pro Ile Ile Ala Phe Gly Gly Leu Ala Gly Leu Leu
 85 90 95
 Gly Ser Ile Val Asp Ser Tyr Leu Gly Ala Thr Met Gln Tyr Thr Gly
 100 105 110
 Leu Asp Glu Ser Thr Gly Met Val Val Asn Ser Pro Thr Asn Xaa Ala
 115 120 125
 Arg His Ile Ala Gly Lys Pro Ile Leu Asp Asn Asn Ala Val Asn Leu
 130 135 140
 Phe Ser Ser Val Leu Ile Ala Leu Leu Leu Pro Thr Ala Ala Trp Gly
 145 150 155 160
 Phe Trp Pro Arg Gly Xaa
 165

<210> 82
 <211> 42
 <212> PRT
 <213> Homo sapiens

<220>

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<221> SITE
 <222> (42)
 <223> Xaa equals stop translation

<400> 82
 Met Cys Gly Leu Val Ile Leu Trp Pro Cys Ile Met Thr Leu Phe Ser
 1 5 10 15
 Ser Leu Ser Thr Gly Asp Val Leu Leu Pro Cys Lys Ile Leu Val Gly
 20 25 30
 Leu Arg Val Phe Ile Gly Ala Arg Val Xaa
 35 40

<210> 83
 <211> 49
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (49)
 <223> Xaa equals stop translation

<400> 83
 Met Cys Phe Pro Ala Cys Leu Cys Ser Pro Leu Thr Cys Leu Leu Ser
 1 5 10 15
 Val Trp Lys Pro Gly Leu Ala His Ala Val Val His Cys Met Leu Glu
 20 25 30
 Pro Val Glu Phe Ala Arg Val Val Gln Tyr Glu Ala Gly His Val Leu
 35 40 45
 Xaa

<210> 84
 <211> 57
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (57)
 <223> Xaa equals stop translation

<400> 84
 Met Leu Ile Ala Lys Leu Pro Val Leu Glu Ser Ile Cys Phe Phe Met
 1 5 10 15
 Leu Phe Leu Asn Pro Leu Val Ile Leu Leu Ser Leu Asn Asn Ala Leu
 20 25 30
 Pro Leu Val Phe His Pro His Ser Glu Phe Leu Glu Asp His Asn Arg
 35 40 45

005453 01550E

Gly Asp Thr Leu Pro Ser Ile Val Xaa
 50 55

<210> 85
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals stop translation

<400> 85
 Met Leu Val Ala Thr Ala Val Cys Cys Tyr Leu Phe Trp Leu Ile Ala
 1 5 10 15

Ile Leu Ala Gln Leu Asn Pro Leu Phe Gly Pro Gln Leu Lys Asn Glu
 20 25 30

Thr Ile Trp Tyr Val Arg Phe Leu Trp Glu Xaa
 35 40

<210> 86
 <211> 41
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (41)
 <223> Xaa equals stop translation

<400> 86
 Met Leu Leu Leu Trp Ala Phe Ser Gly Val Cys Ala Val Pro Ala Arg
 1 5 10 15

Ala Thr Pro Val Pro Ser Ser Phe Cys Pro Gln Gly Pro Ser Leu Cys
 20 25 30

Pro Lys Gln Pro Ala Ser Leu Ala Xaa
 35 40

<210> 87
 <211> 74
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (74)
 <223> Xaa equals stop translation

<400> 87
 Met His Ala Tyr Ala Cys Val Cys Ala Cys Met Leu Val Cys Val Cys
 1 5 10 15

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Val Cys Val Cys Arg Ala Leu Val Ile Pro Thr Glu Gln Arg His Arg
20 25 30

Arg Val Ala His Gly Arg Thr Ser Asp Ser Thr Leu Pro Cys Thr Val
35 40 45

Lys Ile Trp Pro Ser Glu Arg Gly Asp Gly Arg Gly Glu Arg Gly Glu
50 55 60

Arg Arg Arg Gly Thr Asp Trp Arg Gly Xaa
65 70

<210> 88

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals stop translation

<400> 88

Met His His Pro Asn Leu Cys Leu His Phe His Ala Ala Phe Ser Leu
1 5 10 15

Cys Val His Gly Cys Leu Cys Val Gln Phe Phe Pro Phe Tyr Lys Asp
20 25 30

Thr Xaa His Ile Gly Leu Glu Pro Thr Leu Met Thr Ser Ser Xaa
35 40 45

<210> 89

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals stop translation

<400> 89

Met Leu Phe Leu Asn Val Ile Leu Phe Ser Leu Thr Val Phe Thr Leu
1 5 10 15

Ile Ser Thr Ala His Thr Leu Asp Arg Ala Val Arg Ser Asp Trp Leu
20 25 30

Leu Leu Val Leu Ile Tyr Ala Cys Leu Glu Glu Leu Ile Pro Glu Leu
35 40 45

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Ile Phe Asn Leu Tyr Cys Gln Gly Asn Ala Thr Leu Phe Phe Xaa
 50 55 60

<210> 90

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals stop translation

<400> 90

Met Leu Leu Lys Leu His Thr Leu Trp Pro Leu Trp Pro Gly Leu Trp
 1 5 10 15

Ala Thr Thr Xaa Ser Asp Ser Leu Gly Glu Arg Thr His Ser Leu Cys
 20 25 30

Arg Arg Lys Lys Ala Ser Leu Ser Thr Gly Trp Met Ser Trp Met Ser
 35 40 45

Cys Arg Ala Arg Ala Thr His Thr Gln Val Val Ser Leu Lys Asp Lys
 50 55 60

Val Glu Phe Ala Pro Xaa
 65 70

<210> 91

<211> 57

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals stop translation

<400> 91

Met Lys Glu Ser Arg Lys Met Leu Trp Val Phe Lys Met Leu Phe Phe
 1 5 10 15

Lys Ile Val Leu Trp Val Asn Leu Leu Ser Ala Ala Leu Ser Cys Ile
 20 25 30

Gln Lys Gln Met Leu Gly Ile Ala Pro Gln Lys Cys Val Pro Lys Leu
 35 40 45

Cys Phe Gln Leu Tyr Ile Met Arg Xaa
 50 55

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<210> 92
 <211> 68
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (68)
 <223> Xaa equals stop translation

<400> 92
 Met Tyr Phe Leu Leu Ser Val Thr Ser Glu Ser Val Trp Arg Ser Trp
 1 5 10 15
 Thr Leu Thr Phe His Ser Phe Ala Ile Leu Ser Leu Arg Cys Trp Thr
 20 25 30
 Ser Leu Leu Leu Leu Ile Pro Leu Thr Ser Cys Asn Phe Ser Ser Pro
 35 40 45
 Ser Trp Arg Met Thr Ala Ser Gln Val Pro Ser Lys Arg Lys Ala Ser
 50 55 60
 Met Thr Leu Xaa
 65

<210> 93
 <211> 45
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (45)
 <223> Xaa equals stop translation

<400> 93
 Met Lys Gly Trp Pro Val Phe Leu Leu Val Gln Ala Val Thr Phe Leu
 1 5 10 15
 Ser Val Ala Gln Ser Gly Ala Met Ala Cys Ala Ala Ser Gly Val Val
 20 25 30
 Tyr Ser Val Asp Val Pro Ala Cys Ser Ser Arg Ser Xaa
 35 40 45

<210> 94
 <211> 55
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (55)
 <223> Xaa equals stop translation

10054988-013503

<400> 94

Met Val Leu Ser Pro Trp Ala Cys Leu Phe Val Val Phe Phe Pro Tyr
 1 5 10 15

Ile Gln Ser Ser Leu Arg Ser Asp Lys His Leu Gln Leu Ser Asn Ile
 20 25 30

Leu Pro Thr Pro Ser His His Ile His Leu Pro Ala Ser Ile Cys Ile
 35 40 45

Gln Leu Arg Ala Gly Asn Xaa
 50 55

<210> 95

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals stop translation

<400> 95

Met Cys Glu Tyr Val Leu Leu Leu Tyr Ile Val Leu Leu Cys Asn Arg
 1 5 10 15

Ser Tyr Ala Val Phe Thr Gln Cys Val Leu Arg Ser Ser Pro Ile Asp
 20 25 30

Ser Ser Arg Asn Ala Val Leu Leu Xaa
 35 40

<210> 96

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals stop translation

<400> 96

Met Thr Thr Pro Gly Leu Leu Ile Leu Phe Leu Ala His Val Cys Leu
 1 5 10 15

Val Asn His Gln Gln Ala Ala Glu Pro Gly Trp Lys Gln His Cys Cys
 20 25 30

Asn Trp Glu Gly His Arg Val Leu Xaa
 35 40

<210> 97

<211> 50

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Kaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Kaa equals stop translation

<400> 97
Met Leu Cys His Val Tyr Leu Leu Leu Val Gly His Ala Xaa Phe Ser
1 5 10 15

Val Gly Leu Met Gly Gln Arg Lys Leu Arg Cys Ser Ile Asn Ser Ala
20 25 30

Leu Arg Ser Ala Val Ser Ser Ala Trp Asn Ser Ser Ile Cys Phe Asn
35 40 45

Ser Xaa
50

<210> 98
<211> S8
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Kaa equals stop translation

<400> 98
Met Ser Glu Trp Cys Gln Pro Asp Gln Ile Leu Leu Gln Phe Pro Val
1 5 10 15

Leu Ala Thr Met Ser Val Ala Phe Leu Ile Gln Arg Cys Phe Cys Phe
20 25 30

Trp Trp Phe Val Leu Asn Ala Phe Ser Ile Pro Ser Gly Thr Glu Lys
35 40 45

Lys Arg Ile Val Phe Lys Lys Trp Leu Xaa
50 55

<210> 99
<211> S2
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)

0054988 012500

<223> Xaa equals stop translation

<400> 99

Met Lys Val Val Val Val Met Val Val Ile Leu Val Val Val Thr Leu
1 5 10 15

Val Val Val Val Met Val Val Ile Leu Val Met Val Val Met Val Val
20 25 30

Ala Leu Val Thr Leu Thr Trp Gly Pro Val Ala Val Thr Val Asp Ala
35 40 45

Gly Ser Trp Xaa
50

<210> 100

<211> 45

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals stop translation

<400> 100

Met Pro His Phe Leu Arg Trp Leu Leu Thr Thr Phe Arg Ile Arg Ala
1 5 10 15

Ser Cys Gly Ser Thr Pro Cys Trp Ser Pro Ser His Leu Gly Cys Leu
20 25 30

Gln Pro Ala Leu Pro Arg Asp Leu Ser His Leu Glu Xaa
35 40 45

<210> 101

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals stop translation

<400> 101

Met Ser Thr Lys Ile Leu Gln Phe Leu Phe Ser Ser Cys Cys Trp Val
1 5 10 15

Pro Pro Met Leu Phe Leu Phe Lys Asn Thr Lys Cys Arg Thr Ser Leu
20 25 30

Leu Tyr Cys Phe Tyr Phe Ile Leu Leu Thr Cys Ser Leu Ser Glu Tyr
35 40 45

Asp Ser Leu Leu Ser Ser Lys Val Phe Xaa
50 55

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<210> 102
 <211> 41
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (41)
 <223> Xaa equals stop translation

<400> 102
 Met Phe Trp Phe Trp Phe Leu Leu Ser Leu Ser Phe Gln Gln Val Glu
 1 5 10 15

Gln Gln Gln Val Phe Gln Cys Ile Cys Cys Thr Arg Thr Lys Tyr Lys
 20 25 30

Ser Val Trp His Gln Lys Ser Lys Kaa
 35 40

<210> 103
 <211> 143
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (104)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (105)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (115)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (143)
 <223> Xaa equals stop translation

<400> 103
 Met Thr Leu Ile Glu Val Leu Val Ser Val Leu Ile Leu Ala Val Gly
 1 5 10 15

Leu Leu Arg Ala Ala Val Ile Gln Leu Asn Ala Leu Lys Tyr Thr Asp
 20 25 30

Ser Ser Arg Met Thr Ser Gln Ala Ser Phe Ile Ala Tyr Asp Met Leu
 35 40 45

Asp Arg Ile Arg Ala Asn Ser Gly Ala Asp Tyr Ser Trp Gly Gln Gly

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50

55

60

Glu Arg Ala Pro Ser Thr Thr Ser Val Ala Ser Val Arg Asp Leu Asp
65 70 75 80

Leu His Asp Phe Glu Ala Asn Ile Val Gly Phe Ala Gly Glu Ser Ala
85 90 95

Lys Gly Ser Val Ala Val Asn Xaa Xaa Glu Val Thr Ile Ser Ile Ser
100 105 110

Trp Asp Xaa Ser Arg Gly Ala Asn Ala Gln Gly Thr Arg Glu Thr Phe
115 120 125

Thr Leu Thr Ser Arg Val Ala Val Asp Pro Arg Val Leu Pro Xaa
130 135 140

<210> 104

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals stop translation

<400> 104

Met Ala Phe Phe Phe Ala Leu Phe Val Ile Phe Phe Val Ile Val Val
1 5 10 15

Gln Met Glu Ser His Ser Gly Leu Gly Lys Lys Ser Lys Ile Leu Ser
20 25 30

Gly Gly Gln Gly Glu Glu Val Tyr Phe Leu Asp Xaa
35 40

<210> 105

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals stop translation

<400> 105

Met Tyr Phe Tyr Leu Ala Val Lys Pro Pro Leu Leu Trp Ala Arg Pro
1 5 10 15

Gln Val Ser Cys Arg Leu Ser Val Ser Leu Ala Trp Ser Tyr His Leu
20 25 30

His Leu Trp Ala Leu Phe Leu Phe Ser Ile Leu Leu Gln Cys Arg Ala
35 40 45

205210"88545001

Arg Phe Leu Leu Leu Leu Val Leu Ser Gln Thr Gln Asp Leu Kaa
50 55 60

<210> 106
<211> 283
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (283)
<223> Kaa equals stop translation

<400> 106
Met Gly Ser Pro Gly Met Val Leu Gly Leu Leu Val Gln Ile Trp Ala
1 5 10 15

Leu Gln Glu Ala Ser Ser Leu Ser Val Gln Gln Gly Pro Asn Leu Leu
20 25 30

Gln Val Arg Gln Gly Ser Gln Ala Thr Leu Val Cys Gln Val Asp Gln
35 40 45

Ala Thr Ala Trp Glu Arg Leu Arg Val Lys Trp Thr Lys Asp Gly Ala
50 55 60

Ile Leu Cys Gln Pro Tyr Ile Thr Asn Gly Ser Leu Ser Leu Gly Val
65 70 75 80

Cys Gly Pro Gln Gly Arg Leu Ser Trp Gln Ala Pro Ser His Leu Thr
85 90 95

Leu Gln Leu Asp Pro Val Ser Leu Asn His Ser Gly Ala Tyr Val Cys
100 105 110

Trp Ala Ala Val Glu Ile Pro Glu Leu Glu Glu Ala Glu Gly Asn Ile
115 120 125

Thr Arg Leu Phe Val Asp Pro Asp Asp Pro Thr Gln Asn Arg Asn Arg
130 135 140

Ile Ala Ser Phe Pro Gly Phe Leu Phe Val Leu Leu Gly Val Gly Ser
145 150 155 160

Met Gly Val Ala Ala Ile Val Trp Gly Ala Trp Phe Trp Gly Arg Arg
165 170 175

Ser Cys Gln Gln Arg Asp Ser Gly Asn Ser Pro Gly Asn Ala Phe Tyr
180 185 190

Ser Asn Val Leu Tyr Arg Pro Arg Gly Ala Pro Lys Lys Ser Glu Asp
195 200 205

Cys Ser Gly Glu Gly Lys Asp Gln Arg Gly Gln Ser Ile Tyr Ser Thr
210 215 220

Ser Phe Pro Gln Pro Ala Pro Arg Gln Pro His Leu Ala Ser Arg Pro
225 230 235 240

205210"88545007

Cys Pro Ser Pro Arg Pro Cys Pro Ser Pro Arg Pro Gly His Pro Val
245 250 255

Ser Met Val Arg Val Ser Pro Arg Pro Ser Pro Thr Gln Gln Pro Arg
260 265 270

Pro Lys Gly Phe Pro Lys Val Gly Glu Glu Xaa
275 280

<210> 107

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (98)

<223> Xaa equals stop translation

<400> 107

Met Cys Lys Leu Cys Phe Tyr Leu Tyr Leu Cys Thr Trp Phe Pro Phe
1 5 10 15

Gly Ala Ser Gly Leu Phe Trp Asp Lys Trp Cys Leu Pro Arg His Leu
20 25 30

Pro Val Val Ser Gly Gln Glu Gln Leu Ser Ser Ser Leu Pro Ala Ala
35 40 45

Leu Leu Phe Leu Gly Arg Arg Trp Arg Pro Pro Leu Arg Val Ser Pro
50 55 60

Gly Leu Ser Phe Arg Gly Gly Arg Ala Gly Glu Pro Gln Gly Trp Gly
65 70 75 80

Asp Ser Trp Glu Met Glu Val Ala Pro Ala Pro Leu Asp Gln Tyr Trp
85 90 95

Leu Xaa

<210> 108

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

<223> Xaa equals stop translation

<400> 108

Met Cys Leu Leu Leu Leu Trp Leu Thr Thr Phe Gln Arg Thr Ser Gly
1 5 10 15

Ala Leu Arg Arg Gly Gly Leu Ser Ser Pro Ala Trp Ala Met Arg Ser

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20 25 30
 Pro Ser Val Tyr Ser Thr Gln Thr Pro Ser Pro Met Met Ser Thr Gly
 35 40 45
 Thr Leu Arg Gly Leu Ser Gly Ala Met Cys Asn Leu Ser Kaa
 50 55 60

<210> 109
 <211> 47
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (47)
 <223> Xaa equals stop translation

<400> 109
 Met Lys Leu Cys Lys Leu Thr Gln Cys Ser Phe Leu Leu Lys Ser Leu
 1 5 10 15
 Ile Leu Leu Leu Glu Gln Leu Asn Val Ser Met Gly Phe Val Ala Ala
 20 25 30
 Phe Asp Val Leu Val Gly Cys Ser Ile Cys Phe Glu Lys His Kaa
 35 40 45

<210> 110
 <211> 47
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (47)
 <223> Xaa equals stop translation

<400> 110
 Met Thr Thr Phe Ser Leu Cys Ser Gln Leu Ala Leu Leu Cys Ala Cys
 1 5 10 15
 Thr Ser Leu Val Ser Leu Pro Pro Phe Val Asp Tyr Lys Asp Thr Ser
 20 25 30
 Pro Val Gly Pro Glu Pro His Cys Lys Gly Leu Ile Leu Thr Kaa
 35 40 45

<210> 111
 <211> 42
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (32)

2054988 01507 "BBB45001"

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals stop translation

<400> 111

Met Asn Ile Leu Val Cys Val Phe Trp Leu Trp Gly Gly Val Ala Gly
1 5 10 15

Ser Trp Gly Arg His Ile Phe Ile Phe Thr Ser Val Lys Asn Val Xaa
20 25 30

Xaa Ala Ser His Cys Ala Trp Pro Xaa Xaa
35 40

<210> 112

<211> 41

<212> PRT

<213> Homo sapiens

<400> 112

Met Gly Gly Ile Ala Leu Pro Ser Leu Ser Leu Cys Leu Leu Ser Ala
1 5 10 15

Gly Ser His Cys Ile Ser Pro Ala Asp Gln Glu Thr Gly Pro Lys Val
20 25 30

Thr Ala Pro Gln Gly Asn Phe Leu Pro
35 40

<210> 113

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals stop translation

<400> 113

Met Ile Val Leu Lys Trp Ile Phe Leu Ala Cys Val His Glu Cys Met
1 5 10 15

Cys Lys Pro Leu Lys Cys Phe Leu Glu Lys Ile Leu Glu Val Leu Ile

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20

25

30

Met Val Lys Leu Lys Met Gly Val Leu Pro Ala Xaa
 35 40

<210> 114
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 114

Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp
 1 5 10 15

Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu
 20 25 30

Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr
 35 40 45

Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile
 50 55 60

Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu Glu Ile Arg Ser Asp
 65 70 75 80

Asn Trp Leu Ala Ser His Leu Gly Leu Pro Pro Asp Ser Leu Leu Ser
 85 90 95

Tyr Pro Ala Asn Tyr Ser Asp Asp Ser Lys Ile Trp Arg Pro Val Glu
 100 105 110

Ile Phe Arg Leu Val Ser Lys Tyr Gln Asn Glu Ile Ser Asp Arg Lys
 115 120 125

Ile Cys Ala Ser Ala Ser Ala Pro Lys Thr Cys Ser Ile Glu Arg Val
 130 135 140

Leu Arg Lys Thr Glu Arg Phe Gln Lys Trp Leu Gln Ala Lys Arg Leu
 145 150 155 160

Thr Pro Asp Leu Val Gln Asp Cys His Gln Gly Gln Arg Glu Leu Lys
 165 170 175

Phe Leu Cys Met Leu Arg
 180

<210> 115
 <211> 81
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (81)
 <223> Xaa equals stop translation

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<400> 115

Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys
 1 5 10 15

Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val
 20 25 30

Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser
 35 40 45

Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe
 50 55 60

Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser
 65 70 75 80

Xaa

<210> 116

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals stop translation

<400> 116

Met Ser Cys Glu Asn Asn Leu Lys Lys Lys Asn Thr Thr Leu Leu Ser
 1 5 10 15

Tyr Leu Ile Phe Leu Ala Leu Val Met Tyr Leu Thr Phe Met Phe Leu
 20 25 30

Ser Ser Val Ser Thr Ser Arg Ile Ser Leu Ser Asn Ser Met Ile Ile
 35 40 45

Xaa

<210> 117

<211> 204

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

"005453" 012502

<220>
 <221> SITE
 <222> (99)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (115)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (151)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (204)
 <223> Xaa equals stop translation

<400> 117
 Met Val Gly Leu Met His Ile Gly Phe Gly Ile Val Leu Cys Leu Ile
 1 5 10 15
 Ser Phe Ser Phe Arg Glu Val Leu Gly Phe Ala Ser Thr Ala Xaa Ile
 20 25 30
 Gly Gly Tyr Pro Phe Trp Gly Gly Leu Ser Phe Ile Ile Ser Gly Ser
 35 40 45
 Leu Ser Val Ser Ala Ser Lys Glu Leu Ser Arg Cys Leu Val Lys Gly
 50 55 60
 Ser Leu Gly Met Asn Ile Gly Arg Ser Ile Leu Ala Phe Ile Gly Val
 65 70 75 80
 Ile Leu Leu Leu Val Asp Met Cys Ile Asn Gly Val Xaa Gly Gln Asp
 85 90 95
 Tyr Trp Xaa Val Leu Ser Gly Lys Gly Ile Ser Ala Thr Leu Met Ile
 100 105 110
 Phe Ser Xaa Leu Glu Phe Phe Val Ala Cys Ala Thr Ala His Phe Ala
 115 120 125
 Asn Gln Ala Asn Thr Thr Thr Asn Met Ser Val Leu Val Ile Pro Asn
 130 135 140
 Met Tyr Glu Ser Asn Pro Xaa Thr Pro Ala Ser Ser Ser Ala Pro Pro
 145 150 155 160
 Arg Cys Asn Asn Tyr Ser Ala Asn Ala Pro Lys Arg Lys Arg Gly Ile
 165 170 175
 Ser Leu Ile Ser Trp Arg Lys Thr Thr Cys Lys Asn Phe Leu Arg Arg
 180 185 190
 Cys Leu Leu Leu Ser Thr Met Ile Ser Ser Leu Xaa
 195 200

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<210> 118
 <211> 19
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (19)
 <223> Xaa equals stop translation

<400> 118
 Ser Leu Asp Ala Phe Arg Leu Ile Arg Ala Met Gly Ala Thr Gly Leu
 1 5 10 15

Ser Phe Xaa

<210> 119
 <211> 13
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (13)
 <223> Xaa equals stop translation

<400> 119
 Leu Val Leu Trp Ile Val Met Leu Thr Tyr Ala Thr Xaa
 1 5 10

<210> 120
 <211> 80
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (80)
 <223> Xaa equals stop translation

<400> 120
 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp
 1 5 10 15

Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu
 20 25 30

Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr
 35 40 45

Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile
 50 55 60

Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu Arg Asn Lys Ile Xaa

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65

70

75

80

<210> 121
 <211> 146
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (96)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (107)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (111)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (115)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (122)
 <223> Kaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (132)
 <223> Kaa equals any of the naturally occurring L-amino acids

<400> 121
 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp
 1 5 10 15
 Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu
 20 25 30
 Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr
 35 40 45
 Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile
 50 55 60
 Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu Glu Ile Arg Ser Asp
 65 70 75 80
 Asn Trp Leu Ala Ser His Leu Gly Thr Ala Ser Arg Phe Pro Leu Kaa
 85 90 95

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Ser Tyr Pro Cys Lys Leu Leu Gln Met Ile Xaa Lys Ile Trp Xaa Pro
100 105 110

Cys Gly Xaa Leu Leu Thr Gly Gln Gln Xaa Ser Asn Glu Ile Ser Lys
115 120 125

Gln Glu Ile Xaa Cys Leu Leu His Pro Pro Pro Lys Asn Leu His Ile
130 135 140

Asp Val
145

<210> 122

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (81)

<223> Xaa equals stop translation

<400> 122

Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys
1 5 10 15

Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val
20 25 30

Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser
35 40 45

Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe
50 55 60

Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser
65 70 75 80

Xaa

<210> 123

<211> 337

<212> PRT

<213> Homo sapiens

<400> 123

Glu Pro His Arg Gly Pro His Leu Pro Pro Asp Leu Gly His His His
1 5 10 15

Gly Gln Arg Pro Gly Leu Gln Asn Ile Asn Val Phe Leu Arg Asn Thr
20 25 30

Val Lys Val Thr Gly Val Val Val Phe Met Phe Ser Leu Ser Trp Gln
35 40 45

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Leu Ser Leu Val Thr Phe Met Gly Phe Pro Ile Ile Met Met Val Ser
 50 55 60
 Asn Ile Tyr Gly Lys Tyr Tyr Lys Arg Leu Ser Lys Glu Val Gln Asn
 65 70 75 80
 Ala Leu Ala Arg Ala Ser Asn Thr Ala Glu Glu Thr Ile Ser Ala Met
 85 90 95
 Lys Thr Val Arg Ser Phe Ala Asn Glu Glu Glu Glu Ala Glu Val Tyr
 100 105 110
 Leu Arg Lys Leu Gln Gln Val Tyr Lys Leu Asn Arg Lys Glu Ala Ala
 115 120 125
 Ala Tyr Met Tyr Tyr Val Trp Gly Ser Gly Leu Thr Leu Leu Val Val
 130 135 140
 Gln Val Ser Ile Leu Tyr Tyr Gly Gly His Leu Val Ile Ser Gly Gln
 145 150 155 160 ..
 Met Thr Ser Gly Asn Leu Ile Ala Phe Ile Ile Tyr Glu Phe Val Leu
 165 170 175
 Gly Asp Cys Met Glu Asn Val Ser Phe Ser Leu Ser Pro Gly Lys Val
 180 185 190
 Thr Ala Leu Val Gly Pro Ser Gly Ser Gly Lys Ser Ser Cys Val Asn
 195 200 205
 Ile Leu Glu Asn Phe Tyr Pro Leu Glu Gly Gly Arg Val Leu Leu Asp
 210 215 220
 Gly Lys Pro Ile Ser Ala Tyr Asp His Lys Tyr Leu His Arg Val Ile
 225 230 235 240
 Ser Leu Val Ser Gln Glu Pro Val Leu Phe Ala Arg Ser Ile Thr Asp
 245 250 255
 Asn Ile Ser Tyr Gly Leu Pro Thr Val Pro Phe Glu Met Val Val Glu
 260 265 270
 Ala Ala Gln Lys Ala Asn Ala His Gly Phe Ile Met Glu Leu Gln Asp
 275 280 285
 Gly Tyr Ser Thr Glu Thr Gly Glu Lys Gly Ala Gln Leu Ser Gly Gly
 290 295 300
 Gln Lys Gln Arg Val Ala Trp Pro Gly Leu Trp Cys Gly Thr Pro Gln
 305 310 315 320
 Ser Ser Ser Trp Met Lys Pro Pro Ala Leu Trp Met Pro Arg Ala Ser
 325 330 335
 Ile

<211> 315
 <212> PRT
 <213> Homo sapiens

<400> 124

Met	Ser	Ser	Ala	Thr	Trp	Thr	Ala	Ala	Ser	Trp	Arg	Thr	Ser	Ala	Thr
1				5					10					15	
Ser	Thr	Ser	Leu	Thr	Arg	Cys	Trp	Ile	Ser	Gly	Gln	Pro	Ala	Cys	Thr
			20					25					30		
Ala	Ala	Ala	Cys	Cys	Trp	Gly	Ala	Thr	Ile	Gly	Val	Ala	Lys	Asn	Ser
			35				40					45			
Ala	Leu	Gly	Pro	Arg	Arg	Leu	Arg	Ala	Ser	Trp	Leu	Val	Ile	Thr	Leu
	50					55					60				
Val	Cys	Leu	Phe	Val	Gly	Ile	Tyr	Ala	Met	Val	Lys	Leu	Leu	Leu	Phe
	65				70					75					80
Ser	Glu	Val	Arg	Arg	Pro	Ile	Arg	Asp	Pro	Trp	Phe	Trp	Ala	Leu	Phe
			85					90						95	
Val	Trp	Thr	Tyr	Ile	Ser	Leu	Gly	Ala	Ser	Phe	Leu	Leu	Trp	Trp	Leu
			100					105					110		
Leu	Ser	Thr	Val	Arg	Pro	Gly	Thr	Gln	Ala	Leu	Glu	Pro	Gly	Ala	Ala
		115					120					125			
Thr	Glu	Ala	Glu	Gly	Phe	Pro	Gly	Ser	Gly	Arg	Pro	Pro	Pro	Glu	Gln
	130					135					140				
Ala	Ser	Gly	Ala	Thr	Leu	Gln	Lys	Leu	Leu	Ser	Tyr	Thr	Lys	Pro	Asp
	145				150					155					160
Val	Ala	Phe	Leu	Val	Ala	Ala	Ser	Phe	Phe	Leu	Ile	Val	Ala	Ala	Leu
			165						170					175	
Gly	Glu	Thr	Phe	Leu	Pro	Tyr	Tyr	Thr	Gly	Arg	Ala	Ile	Asp	Gly	Ile
			180					185					190		
Val	Ile	Gln	Lys	Ser	Met	Asp	Gln	Phe	Ser	Thr	Ala	Val	Val	Ile	Val
	195						200					205			
Cys	Leu	Leu	Ala	Ile	Gly	Ser	Ser	Phe	Ala	Ala	Gly	Ile	Arg	Gly	Gly
	210					215					220				
Ile	Phe	Thr	Leu	Ile	Phe	Ala	Arg	Leu	Asn	Ile	Arg	Leu	Arg	Asn	Cys
	225				230					235					240
Leu	Phe	Arg	Ser	Leu	Val	Ser	Gln	Glu	Thr	Ser	Phe	Phe	Asp	Glu	Asn
				245				250						255	
Arg	Thr	Gly	Asp	Leu	Ile	Ser	Arg	Leu	Thr	Ser	Asp	Thr	Thr	Met	Val
			260					265					270		
Ser	Asp	Leu	Val	Ser	Arg	Thr	Ser	Met	Ser	Ser	Cys	Gly	Thr	Gln	Ser
		275						280				285			

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Arg Ser Arg Ala Trp Trp Ser Ser Cys Ser Ala Ser His Gly Ser Ser
290 295 300

Pro Trp Ser Pro Ser Trp Ala Ser Pro Ser Ser
305 310 315

<210> 125

<211> 167

<212> PRT

<213> Homo sapiens

<400> 125

His Leu Leu Arg Pro Ala His Cys Ala Phe Arg Asp Gly Gly Gly Gly
1 5 10 15

Arg Thr Glu Gly Gln Cys Pro Arg Leu His His Gly Thr Pro Gly Arg
20 25 30

Leu Gln His Arg Asp Arg Gly Glu Gly Arg Pro Ala Val Arg Trp Pro
35 40 45

Glu Ala Ala Gly Gly Met Ala Arg Ala Leu Val Arg Asn Pro Pro Val
50 55 60

Leu Ile Leu Asp Glu Ala Thr Ser Ala Leu Asp Ala Glu Ser Glu Tyr
65 70 75 80

Leu Ile Gln Gln Ala Ile His Gly Asn Leu Gln Lys His Thr Val Leu
85 90 95

Ile Ile Ala His Arg Leu Ser Thr Val Glu His Ala His Leu Ile Val
100 105 110

Val Leu Asp Lys Gly Arg Val Val Gln Gln Gly Thr His Gln Gln Leu
115 120 125

Leu Ala Gln Gly Gly Leu Tyr Ala Lys Leu Val Gln Arg Gln Met Leu
130 135 140

Gly Leu Gln Pro Ala Ala Asp Phe Thr Ala Gly His Asn Glu Pro Val
145 150 155 160

Ala Asn Gly Ser His Lys Ala
165

<210> 126

<211> 227

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 126

Arg Leu Thr Lys Thr Ile Ser Phe Ser Leu Gln Asn Gln Thr Ala Phe

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<210> 127
<211> 29
<212> PRT
<213> Homo sapiens
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<210> 128

<211> 27
 <212> PRT
 <213> Homo sapiens

<400> 128
 Arg Val Leu Asp Leu Leu Thr Thr Glu Lys Gly Gly Thr Cys Ile Tyr
 1 5 10 15
 Leu Gln Glu Glu Cys Cys Phe Cys Val Asn Glu
 20 25

<210> 129
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 129
 Phe Ser Leu Gly Arg Arg His Cys Leu Gly
 1 5 10

<210> 130
 <211> 123
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (64)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (83)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 130
 Glu His Pro Thr Ala Asp Arg Ala Gly Cys Ser Ala Ser Gly Ala Cys
 1 5 10 15
 Tyr Ser Leu His His Ala Thr Met Lys Arg Gln Ala Ala Glu Glu Ala
 20 25 30
 Cys Ile Leu Arg Gly Gly Ala Leu Ser Thr Val Arg Ala Gly Ala Glu
 35 40 45
 Leu Arg Ala Val Leu Ala Leu Leu Arg Ala Gly Pro Gly Pro Gly Xaa
 50 55 60
 Gly Ser Lys Asp Leu Leu Phe Trp Val Ala Leu Glu Arg Arg Arg Ser
 65 70 75 80
 His Cys Xaa Leu Glu Asn Glu Pro Leu Arg Gly Phe Ser Trp Leu Ser
 85 90 95
 Ser Asp Pro Gly Gly Leu Glu Ser Asp Thr Leu Gln Trp Val Glu Glu
 100 105 110

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Pro Gln Arg Ser Cys Thr Ala Arg Arg Trp Val
115 120

<210> 131
<211> 344
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Kaa equals any of the naturally occurring L-amino acids

<400> 131
Ser Arg Pro Pro Val Gly Ser Ser Pro Gln Leu Glu Gly Asp Ala Met
1 5 10 15
Pro Pro Kaa Arg Gln Arg Tyr Leu Cys Lys Tyr Gln Phe Glu Val Leu
20 25 30
Cys Pro Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr Arg Ala
35 40 45
Pro Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro Gly Thr
50 55 60
Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val Thr Cys
65 70 75 80
Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly Asp Val
85 90 95
Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys Cys Ala Glu
100 105 110
Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala Cys Glu Cys Ala
115 120 125
Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser Cys Val Thr Ser Gly
130 135 140
Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly Val Pro Thr Arg Arg Pro
145 150 155 160
Pro Ala Thr Ala Thr Ser Pro Val Pro Gln Arg Thr Trp Pro Ile Arg
165 170 175
Val Asp Glu Lys Leu Gly Glu Thr Pro Leu Val Pro Glu Gln Asp Asn
180 185 190
Ser Val Thr Ser Ile Pro Glu Ile Pro Arg Trp Gly Ser Gln Ser Thr
195 200 205
Met Ser Thr Leu Gln Met Ser Leu Gln Ala Glu Ser Lys Ala Thr Ile
210 215 220
Thr Pro Ser Gly Ser Val Ile Ser Lys Phe Asn Ser Thr Thr Ser Ser
225 230 235 240

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Ala Thr Pro Gln Ala Phe Asp Ser Ser Ser Ala Val Val Phe Ile Phe
245 250 255

Val Ser Thr Ala Val Val Val Leu Val Ile Leu Thr Met Thr Val Leu
260 265 270

Gly Leu Val Lys Leu Cys Phe His Glu Ser Pro Ser Ser Gln Pro Arg
275 280 285

Lys Glu Ser Met Gly Pro Pro Gly Trp Arg Val Ile Leu Lys Pro Ala
290 295 300

Ala Leu Gly Ser Ser Ser Ala His Cys Thr Asn Asn Gly Val Lys Val
305 310 315 320

Gly Asp Cys Asp Leu Arg Asp Arg Ala Glu Gly Ala Leu Leu Ala Glu
325 330 335

Ser Pro Leu Gly Ser Ser Asp Ala
340

<210> 132

<211> 7

<212> PRT

<213> Homo sapiens

<400> 132

Arg Tyr Leu Thr Leu Thr His
1 5

<210> 133

<211> 6

<212> PRT

<213> Homo sapiens

<400> 133

Cys Asn Thr Pro Trp Ala
1 5

<210> 134

<211> 8

<212> PRT

<213> Homo sapiens

<400> 134

Ala Pro Val Ile Phe Ser His Ser
1 5

<210> 135

<211> 6

<212> PRT

<213> Homo sapiens

<400> 135

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Arg Asn Val Pro Asp Asp
1 5

<210> 136
<211> 6
<212> PRT
<213> Homo sapiens

<400> 136
Gly Leu Glu Asp Val Ser
1 5

<210> 137
<211> 23
<212> PRT
<213> Homo sapiens

<400> 137
Val Glu Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr
1 5 10 13

Phe Tyr Met Leu Gly Val Arg
20

<210> 138
<211> 6
<212> PRT
<213> Homo sapiens

<400> 138
Val Glu Gly Gly His Ser
1 5

<210> 139
<211> 190
<212> PRT
<213> Homo sapiens

<400> 139
Thr Trp Leu Arg Leu Gly Ser Ser Gln Ile Trp Leu Gly Thr Ala Pro
1 5 10 15

Arg Gly Pro Arg Ile His Pro Glu Gln Ala Gly Leu Ala Gly Ala Pro
20 25 30

Val Lys Ser Thr Ser Ser Glu Glu Ser Gln Pro Gly Gly Gln Cys Gln
35 40 45

Ser Ser Gly Gly Ala Gln Thr Leu Pro Ser Leu Arg Ala Ala Pro Val
50 55 60

Ala Ala Leu Gly Ser Leu Ser Ser Tyr Pro Asp Ser Cys Pro Arg Ala
65 70 75 80

Thr Thr Pro Glu Leu Cys Pro Gly Ala Pro Thr Leu His Leu Ala Asp

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95

<213> Homo sapiens

<400> 141

Arg Ser Gly Gln Pro Gly Glu Gly Ser Met Leu Arg Lys Phe Ser Leu
 1 5 10 15

Gln Arg Leu Leu Ser Pro Leu Asp Gln Ala Gln Thr Arg Trp Gly Leu
 20 25 30

Ala Leu Ala Cys Val Ala Gly Asp Lys Gly Pro Pro Arg Pro Trp Asn
 35 40 45

Ile Ser Ser Ala Pro Ala His Pro His Val Thr Thr Pro Gly Met Glu
 50 55 60

Thr Ser Gly Gly Pro Ala Arg Asp Gly Gly Leu Ile Leu Glu Arg Glu
 65 70 75 80

Ala Ala Phe Asn Lys Pro Ala Pro Gly Glu
 85 90

<210> 142

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (197)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (203)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (219)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (255)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 142

Arg Cys Gln Arg Asn Lys Asp Ile Met Met Ser Ser Lys Pro Thr Ser
 1 5 10 15

His Ala Glu Val Asn Glu Thr Ile Pro Asn Pro Tyr Pro Pro Ser Ser
 20 25 30

Phe Met Ala Pro Gly Phe Gln Gln Pro Leu Gly Ser Ile Asn Leu Glu

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35 40 45
 Asn Gln Ala Gln Gly Ala Gln Arg Ala Gln Pro Tyr Gly Ile Thr Ser
 50 55 60
 Pro Gly Ile Phe Ala Ser Ser Gln Pro Gly Gln Gly Asn Ile Gln Met
 65 70 75 80
 Ile Asn Pro Ser Val Gly Thr Ala Val Met Asn Phe Lys Glu Glu Ala
 85 90 95
 Lys Ala Leu Gly Val Ile Gln Ile Met Val Gly Leu Met His Ile Gly
 100 105 110
 Phe Gly Ile Val Leu Cys Leu Ile Ser Phe Ser Phe Arg Glu Val Leu
 115 120 125
 Gly Phe Ala Ser Thr Ala Xaa Ile Gly Gly Tyr Pro Phe Trp Gly Gly
 130 135 140
 Leu Ser Phe Ile Ile Ser Gly Ser Leu Ser Val Ser Ala Ser Lys Glu
 145 150 155 160
 Leu Ser Arg Cys Leu Val Lys Gly Ser Leu Gly Met Asn Ile Gly Arg
 165 170 175
 Ser Ile Leu Ala Phe Ile Gly Val Ile Leu Leu Leu Val Asp Met Cys
 180 185 190
 Ile Asn Gly Val Xaa Gly Gln Asp Tyr Trp Xaa Val Leu Ser Gly Lys
 195 200 205
 Gly Ile Ser Ala Thr Leu Met Ile Phe Ser Xaa Leu Glu Phe Phe Val
 210 215 220
 Ala Cys Ala Thr Ala His Phe Ala Asn Gln Ala Asn Thr Thr Thr Asn
 225 230 235 240
 Met Ser Val Leu Val Ile Pro Asn Met Tyr Glu Ser Asn Pro Xaa Thr
 245 250 255
 Pro Ala Ser Ser Ser Ala Pro Pro Arg Cys Asn Asn Tyr Ser Ala Asn
 260 265 270
 Ala Pro Lys Arg Lys Arg Gly Ile Ser Leu Ile Ser Trp Arg Lys Thr
 275 280 285
 Thr Cys Lys Asn Phe Leu Arg Arg Cys Leu Leu Leu Ser Thr Met Ile
 290 295 300
 Ser Ser Leu
 305

<210> 143

<211> 246

<212> PRT

<213> Homo sapiens

"01506" 88645004

<400> 143

Met Gly Arg Leu Asp Gly Lys Val Ile Ile Leu Thr Ala Ala Ala Gln
 1 5 10 15

Gly Ile Gly Gln Ala Ala Ala Leu Ala Phe Ala Arg Glu Gly Ala Lys
 20 25 30

Val Ile Ala Thr Asp Ile Asn Glu Ser Lys Leu Gln Glu Leu Glu Lys
 35 40 45

Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln
 50 55 60

Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn
 65 70 75 80

Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys
 85 90 95

Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Asn Val Met Tyr Leu
 100 105 110

Met Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn
 115 120 125

Ile Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn
 130 135 140

Arg Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys
 145 150 155 160

Ser Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val
 165 170 175

Cys Pro Gly Thr Val Asp Thr Pro Ser Leu Gln Glu Arg Ile Gln Ala
 180 185 190

Arg Gly Asn Pro Glu Glu Ala Arg Asn Asp Phe Leu Lys Arg Gln Lys
 195 200 205

Thr Gly Arg Phe Ala Thr Ala Glu Glu Ile Ala Met Leu Cys Val Tyr
 210 215 220

Leu Ala Ser Asp Glu Ser Ala Tyr Val Thr Gly Asn Pro Val Ile Ile
 225 230 235 240

Asp Gly Gly Trp Ser Leu
 245

<210> 144

<211> 234

<212> PRT

<213> Homo sapiens

<400> 144

Gly Thr Ile Gly Leu Tyr Trp Val Gly Ser Ile Ile Met Ser Val Val
 1 5 10 15

0054988 01506

Val Phe Val Pro Gly Asn Ile Val Gly Lys Tyr Gly Thr Arg Ile Cys
 20 25 30
 Pro Ala Phe Phe Leu Ser Ile Pro Tyr Thr Cys Leu Pro Val Trp Ala
 35 40 45
 Gly Phe Arg Ile Tyr Asn Gln Pro Ser Glu Asn Tyr Asn Tyr Pro Ser
 50 55 60
 Lys Val Ile Gln Glu Ala Gln Ala Lys Asp Leu Leu Arg Arg Pro Phe
 65 70 75 80
 Asp Leu Met Leu Val Val Cys Leu Leu Leu Ala Thr Gly Phe Cys Leu
 85 90 95
 Phe Arg Gly Leu Ile Ala Leu Asp Cys Pro Ser Glu Leu Cys Arg Leu
 100 105 110
 Tyr Thr Gln Phe Gln Glu Pro Tyr Leu Lys Asp Pro Ala Ala Tyr Pro
 115 120 125
 Lys Ile Gln Met Leu Ala Tyr Met Phe Tyr Ser Val Pro Tyr Phe Val
 130 135 140
 Thr Ala Leu Tyr Gly Leu Val Val Pro Gly Cys Ser Trp Met Pro Asp
 145 150 155 160
 Ile Thr Leu Ile His Ala Gly Gly Leu Ala Gln Ala Gln Phe Ser His
 165 170 175
 Ile Gly Ala Ser Leu His Ala Arg Thr Ala Tyr Val Tyr Arg Val Pro
 180 185 190
 Glu Glu Ala Lys Ile Leu Phe Leu Ala Leu Asn Ile Ala Tyr Gly Val
 195 200 205
 Leu Pro Gln Leu Leu Ala Tyr Arg Cys Ile Tyr Lys Pro Glu Phe Phe
 210 215 220
 Ile Lys Thr Lys Ala Glu Glu Lys Val Glu
 225 230

<210> 145

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (184)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 145

Met Ser Asn His Asp Pro Arg Gly Cys Thr Arg Arg Arg Ala Gln Lys
 1 5 10 15

Pro Leu Ala Ile Gln Pro Arg Leu Phe His Ala Ser Ala Pro Asp Glu
 20 25 30

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Gly Thr Gln Gly Thr Leu Lys Gly Thr Gln Lys Gly Gly Cys Ile Leu
 35 40 45
 Val Gln Cys Gln Ser Glu Gly Gly Ala Ala Gly Ala Trp Thr Gly Pro
 50 55 60
 Pro Ser Pro Ala Arg Asp Arg Arg Val Arg Pro Pro Gly Thr Lys Ala
 65 70 75 80
 Gln Arg Leu Glu Arg Arg Arg His Val Pro Arg Leu His Gly Leu Gly
 85 90 95
 Val Gly Gly Cys Glu Val Arg Thr Gly Ile Val Ala Arg Ile Ser Gly
 100 105 110
 Ser Thr Pro Trp Ala Gly Gly Lys Pro Leu Gly Leu His Gly Ala Met
 115 120 125
 Gly Glu Ala Gly Ala Gly Asp Thr Gly Cys Cys Ala Lys Gly Pro Ser
 130 135 140
 Pro Ala Ala Pro Leu Pro Ala Glu Gly Arg Gly Gln Gly Ala Gly Pro
 145 150 155 160
 Gly Gly Leu Val Gly Arg Gly Glu Arg Arg Asp Gln Gln Thr Leu Leu
 165 170 175
 Gly Met Ala Glu Asp Thr Gly Xaa Ser Pro Ser Arg Pro Ser Ala Pro
 180 185 190
 Ala Pro Arg Ala Pro Val Pro Ala Arg Gln Pro Leu Pro Arg Ala Arg
 195 200 205
 Leu Gly Ala Ala Thr Ala Ile Ser Lys Ser Arg Ser Ser Arg Val Ala
 210 215 220
 Pro Ala Leu Ala Ala Ala Ile Ser Ala Ser Ser His Gln Arg
 225 230 235

<210> 146

<211> 207

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 146

Ser Thr Xaa Thr Xaa Thr Ile Gly Xaa Ala Gly Thr Pro Ala Gly Thr
1 5 10 15

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Gly Glu Xaa Pro Val
20 25 30

Asp Phe Ser Lys Gln Tyr Ser Ala Ser Trp Met Cys Leu Ser Leu Leu
35 40 45

Ala Ala Leu Ala Cys Ser Ala Gly Asp Thr Trp Ala Ser Glu Val Gly
50 55 60

Pro Val Leu Ser Lys Ser Ser Pro Arg Leu Ile Thr Thr Trp Glu Lys
65 70 75 80

Val Pro Val Gly Thr Asn Gly Gly Val Thr Val Val Gly Leu Val Ser
85 90 95

Ser Leu Leu Gly Gly Thr Phe Val Gly Ile Ala Tyr Phe Leu Thr Gln
100 105 110

Leu Ile Phe Val Asn Asp Leu Asp Ile Ser Ala Pro Gln Trp Pro Ile
115 120 125

Ile Ala Phe Gly Gly Leu Ala Gly Leu Leu Gly Ser Ile Val Asp Ser
130 135 140

Tyr Leu Gly Ala Thr Met Gln Tyr Thr Gly Leu Asp Glu Ser Thr Gly
145 150 155 160

Met Val Val Asn Ser Pro Thr Asn Xaa Ala Arg His Ile Ala Gly Lys
165 170 175

Pro Ile Leu Asp Asn Asn Ala Val Asn Leu Phe Ser Ser Val Leu Ile
180 185 190

Ala Leu Leu Leu Pro Thr Ala Ala Trp Gly Phe Trp Pro Arg Gly
195 200 205

<210> 147

<211> 116

<212> PRT

<213> Homo sapiens

<400> 147

1005433 012502

Met Ser Gln Arg Ala Gly Arg Arg Pro Gly Gly Trp Asn Pro Ser Leu
1 5 10 15

Ser Val Val Glu Val Cys Arg Gly Cys Arg Gly Thr Gly Pro Leu Pro
20 25 30

Trp Gly Ala Ser Leu Phe Pro Cys Ser Ala Ser Pro Leu Phe Pro Leu
35 40 45

Pro Leu Asn Arg Arg Gly Asp Val His Gly Thr Leu Gly Gly Arg Met
50 55 60

Leu Asn Arg Val Glu Cys Arg Asp Gly Val Ala Ala Ala Trp Leu Cys
65 70 75 80

Leu His Asp Ala Ala Ala Ile Arg Gly Ala Val Gly Arg Cys Pro Met
85 90 95

Trp Thr Gln Pro Thr His Trp Val Leu Leu Leu Cys Trp Ala Leu His
100 105 110

Phe Tyr Cys Arg
115

<210> 148

<211> 81

<212> PRT

<213> Homo sapiens

<400> 148

Met Thr Ala His Ser Phe Ala Leu Pro Val Ile Ile Phe Thr Thr Phe
1 5 10 15

Trp Gly Leu Val Gly Ile Ala Gly Pro Trp Phe Val Pro Lys Gly Pro
20 25 30

Asn Arg Gly Val Ile Ile Thr Met Leu Val Ala Thr Ala Val Cys Cys
35 40 45

Tyr Leu Phe Trp Leu Ile Ala Ile Leu Ala Gln Leu Asn Pro Leu Phe
50 55 60

Gly Pro Gln Leu Lys Asn Glu Thr Ile Trp Tyr Val Arg Phe Leu Trp
65 70 75 80

Glu

<210> 149

<211> 110

<212> PRT

<213> Homo sapiens

<400> 149

Ala Gln Arg Ala Ala Arg Leu Gly Thr Arg Ala Pro Ala Ala Pro Ala
1 5 10 15

1005498 01506

<400> 151

His Glu Lys Ile Leu Thr Pro Ile Trp Pro Ser Ser Thr Asp Leu Glu
 1 5 10 15
 Lys Pro His Glu Met Leu Phe Leu Asn Val Ile Leu Phe Ser Leu Thr
 20 25 30
 Val Phe Thr Leu Ile Ser Thr Ala His Thr Leu Asp Arg Ala Val Arg
 35 40 45
 Ser Asp Trp Leu Leu Leu Val Leu Ile Tyr Ala Cys Leu Glu Glu Leu
 50 55 60
 Ile Pro Glu Leu Ile Phe Asn Leu Tyr Cys Gln Gly Asn Ala Thr Leu
 65 70 75 80
 Phe Phe

<210> 152
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 152
 Pro Ala Asn Lys Ala Gly Ala Ala Ile Glu Ala Gly Ile Gly Ile Ser
 1 5 10 15
 Leu Met Val Leu Ser Pro Trp Ala Cys Leu Phe Val Val Phe Phe Pro
 20 25 30
 Tyr Ile Gln Ser Ser Leu Arg Ser Asp Lys His Leu Gln Leu Ser Asn
 35 40 45
 Ile Leu Pro Thr Pro Ser His His Ile His Leu Pro Ala Ser Ile Cys
 50 55 60
 Ile Gln Leu Arg Ala Gly Asn
 65 70

<210> 153
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 153
 Ala Gly Ser Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr
 1 5 10 15
 Arg Pro Ile Ser Thr His Val Phe Glu Tyr Glu Cys Ile Cys Lys Ile
 20 25 30
 Pro Arg Phe Met Cys Glu Tyr Val Leu Leu Leu Tyr Ile Val Leu Leu
 35 40 45
 Cys Asn Arg Ser Tyr Ala Val Phe Thr Gln Cys Val Leu Arg Ser Ser
 50 55 60

2054988 01506

Pro Ile Asp Ser Ser Arg Asn Ala Val Leu Leu
65 70 75

<210> 154
<211> 483
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 154
Met Pro Ser Gly Met Ser Ala Ala Val Pro Ile Ser Gly Leu Leu Asp
1 5 10 15
Leu Ser His Asn Ser Ile Ser Gln Glu Ser Ala Leu Tyr Leu Leu Glu
20 25 30
Thr Leu Pro Ser Cys Pro Arg Val Arg Glu Ala Ser Val Asn Leu Gly
35 40 45
Ser Glu Gln Ser Phe Arg Ile His Phe Ser Arg Glu Asp Gln Ala Gly
50 55 60
Lys Thr Leu Arg Leu Ser Glu Cys Ser Phe Arg Pro Glu His Val Ser
65 70 75 80
Arg Leu Ala Thr Gly Leu Ser Lys Ser Leu Gln Leu Thr Glu Leu Thr
85 90 95
Leu Thr Gln Cys Cys Leu Gly Gln Lys Gln Leu Ala Ile Leu Leu Ser
100 105 110
Leu Val Gly Arg Pro Ala Gly Leu Phe Ser Leu Arg Val Gln Glu Pro
115 120 125
Trp Ala Asp Arg Ala Arg Val Leu Ser Leu Leu Glu Val Cys Ala Gln
130 135 140
Ala Ser Gly Ser Val Thr Glu Ile Ser Ile Ser Glu Thr Gln Gln Gln
145 150 155 160
Leu Cys Val Gln Leu Glu Phe Pro Arg Gln Glu Glu Asn Pro Glu Ala
165 170 175
Val Ala Leu Arg Leu Ala His Cys Asp Leu Gly Ala His His Ser Leu
180 185 190
Leu Xaa Gly Gln Leu Met Glu Thr Cys Ala Arg Leu Xaa Gln Leu Ser
195 200 205

0054988 01506

Leu Ser Gln Val Asn Leu Cys Glu Asp Asp Asp Ala Ser Ser Leu Leu
210 215 220

Leu Gln Ser Leu Leu Leu Ser Leu Ser Glu Leu Lys Thr Phe Arg Leu
225 230 235 240

Thr Ser Ser Cys Val Ser Thr Glu Gly Leu Ala His Leu Ala Ser Gly
245 250 255

Leu Gly His Cys His His Leu Glu Glu Leu Asp Leu Ser Asn Asn Gln
260 265 270

Phe Asp Glu Glu Gly Thr Lys Ala Leu Met Arg Ala Leu Glu Gly Lys
275 280 285

Trp Met Leu Lys Arg Leu Asp Leu Ser His Leu Leu Leu Asn Ser Ser
290 295 300

Thr Leu Ala Leu Leu Thr His Arg Leu Ser Gln Met Thr Cys Leu Gln
305 310 315 320

Ser Leu Arg Leu Asn Arg Asn Ser Ile Gly Asp Val Gly Cys Cys His
325 330 335

Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu Glu Leu Asp Leu
340 345 350

Ser His Asn Gln Ile Gly Asp Ala Gly Val Gln His Leu Ala Thr Ile
355 360 365

Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu Ser Gly Asn Ser
370 375 380

Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser Leu Val Leu Cys
385 390 395 400

Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala Leu Gly Asp Pro
405 410 415

Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His Leu Arg Val Leu
420 425 430

His Leu Pro Phe Ser His Leu Gly Pro Gly Gly Ala Leu Ser Leu Ala
435 440 445

Arg Pro Trp Met Asp Pro Pro Ile Trp Lys Arg Ser Ala Trp Arg Lys
450 455 460

Thr Thr Trp Leu Glu Gly Ser Cys Val Ser Val Trp Ser Ser Arg Cys
465 470 475 480

Ser Asp Arg

<210> 155

<211> 221

<212> PRT

<213> Homo sapiens

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<400> 155

His Gln Leu Ser Arg Gly Ser Ala Val Gly Arg Val Ser Arg Ser Leu
 1 5 10 15

Gln Ala Pro Gly Gly Val Asp Ala Trp Leu Gln Cys Pro Gly Gly Ser
 20 25 30

His Ser Pro Gly Ala Gly Ser Gly Ala Ala Pro Ala Pro Glu Gly Pro
 35 40 45

Thr Pro Thr Ile Gln Pro Ser Gly Pro Arg Trp Gly Pro Glu Pro Gly
 50 55 60

Gln Ala Leu Asp Gly Ser Pro His Leu Glu Glu Ile Ser Leu Ala Glu
 65 70 75 80

Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met Glu Leu Pro Leu
 85 90 95

Leu Arg Gln Ile Asp Leu Val Ser Cys Lys Ile Asp Asn Gln Thr Ala
 100 105 110

Lys Leu Leu Thr Ser Ser Phe Thr Ser Cys Pro Ala Leu Glu Val Ile
 115 120 125

Leu Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala
 130 135 140

Gln Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys
 145 150 155 160

Asn Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala
 165 170 175

Gln Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro
 180 185 190

Cys Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro Arg Leu Asp Phe
 195 200 205

Ala Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr
 210 215 220

<210> 156

<211> 89

<212> PRT

<213> Homo sapiens

<400> 156

Glu Lys Leu Phe Cys Phe Glu Met Leu Leu Ile Cys Lys Phe Ser Pro
 1 5 10 15

Asn Ser Val Pro Pro Glu Thr Cys Ala Ile Leu Asn Gln Gly Leu Met
 20 25 30

Asp Leu Gly Leu Cys Arg Met Cys Leu Gly Asn Asn Met Phe Ala Gly
 35 40 45

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Ser Met Leu Gly Lys Ser His Arg His Ser Pro Phe Ser Ile Asn Gln
 50 55 60

Arg His Asn Ala Leu Arg Lys Ala Ala Gly Thr Pro Ala Gln Lys Ser
 65 70 75 80

Leu Gly Ile Val Gln Val Ser Pro Asn
 85

<210> 157
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 157
 Gly Cys Ala Gly Cys Ala Leu Val Thr Ile Cys Leu Gln Ala Val Cys
 1 5 10 15

Leu Val Lys Ala Ile Ala Ile Leu His Ser Arg Leu Thr Arg Asp Thr
 20 25 30

Met His Cys Gly Arg Pro Gln Gly Pro Leu Pro Arg Lys Ala Trp Val
 35 40 45

Leu Ser Arg Phe Pro Pro Thr Glu Thr Ala
 50 55

<210> 138
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 158
 Pro Glu Thr Gln Cys Thr Ala Glu Gly Arg Arg Asp Pro Cys Pro Glu
 1 5 10 15

Lys Pro Gly Tyr Cys Pro Gly Phe Pro Gln Leu Arg Gln Pro Glu Ile
 20 25 30

Trp Pro Arg Gly Lys Gly Lys Thr Leu His Pro Pro Ala Arg His Met
 35 40 45

<210> 159
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 159
 Ser Glu Ile Gly Glu Asn Arg Pro
 1 5

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<210> 160
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 160
 His Asp Thr Asp Ser Phe Ala His
 1 5

<210> 161
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 161
 Ala Leu Arg Lys Ala Ala Gly
 1 5

<210> 162
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 162
 Met Arg Gly Pro Val Cys Gly Phe Ser Leu Val Glu Met Leu Leu Ala
 1 5 10 15
 Leu Ala Leu Gly Leu Met Leu Ile Leu Gly Val Thr Gln Ile Ala Leu
 20 25 30
 Ser Ser Arg Thr Thr Tyr Ala Ser Gln Ser Ala Ala Ser Leu Leu Gln
 35 40 45
 Asp Asp Ala Arg Phe Ala Leu Gly Lys Leu Ile Gln Glu Ile Arg Gln
 50 55 60
 Ala Gly Met Phe Gly Cys Leu Ser Ala Ala Ser Ile Ser Asn Ala Pro
 65 70 75 80
 Ala Gly Phe Asp Arg Pro Ile Gly Trp Ser Thr Thr Gly Ser Ser Arg
 85 90 95
 Ser Leu Thr Leu Val Thr Ala Asp Val Gly Glu Gly Gly Ser Lys Pro
 100 105 110
 Asp Trp Thr Val Leu Ser Asp Cys Thr Gly Ser Ala His Ala Tyr Val
 115 120 125
 Gly Ser Pro Pro Ala Ala Asn Ala Arg Ala Asn Pro Leu Pro Thr Cys
 130 135 140
 Ala Lys Leu Thr
 145

<210> 163
 <211> 137

205210"88545001

<212> PRT

<213> Homo sapiens

<400> 163

Met Gly Tyr Tyr Leu Ser Arg Ser Arg Gln Ala Gly Met Val Leu Leu
 1 5 10 15

Ile Ser Leu Val Phe Leu Leu Leu Leu Ala Leu Leu Gly Val Ser Ser
 20 25 30

Met Gln Gly Ala Ile Ser Gln Glu Lys Ile Thr Gly Ser Leu Arg Gln
 35 40 45

Arg Asn Gln Ser Phe Gln Gln Ala Glu Ser Gly Leu Arg Leu Gly Glu
 50 55 60

Ser Leu Val Gln Ala Ser Gly Phe Ala Leu Arg Pro Cys His Ser Thr
 65 70 75 80

Ala Ala Cys Ala Pro Pro Ala Glu Ser Val Ser Val Val Gly Pro Gly
 85 90 95

Thr Asn Pro Val Ser Thr Val Thr Trp Ile Gly Met Lys Asp Gly Val
 100 105 110

Tyr Gly Ile Gln Asn Leu Gly Pro Gly Thr Gly Leu Val Asn Ser Arg
 115 120 125

Gln Arg Pro Arg Pro Arg Ser Ile Ala
 130 135

<210> 164

<211> 209

<212> PRT

<213> Homo sapiens

<400> 164

Glu Asn Glu Ser Thr Lys Glu Pro Ser Leu Leu Gln Tyr Leu Cys Val
 1 5 10 15

Gln Ser Pro Ala Gly Leu Asn Gly Phe Asn Val Leu Leu Ser Gly Ser
 20 25 30

Gln Thr Pro Pro Thr Val Gly Pro Ser Ser Gly Gln Leu Pro Ser Phe
 35 40 45

Ser Val Pro Cys Met Val Leu Pro Ser Pro Pro Leu Gly Pro Phe Pro
 50 55 60

Val Leu Tyr Ser Pro Ala Met Pro Gly Pro Val Ser Ser Thr Leu Gly
 65 70 75 80

Ala Leu Pro Asn Thr Gly Pro Val Asn Phe Ser Leu Pro Gly Leu Gly
 85 90 95

Ser Ile Ala Gln Leu Leu Val Gly Pro Thr Ala Val Val Asn Pro Lys
 100 105 110

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Ser Ser Thr Leu Pro Ser Ala Asp Pro Gln Leu Gln Ser Gln Pro Ser
 115 120 125

Leu Asn Leu Ser Pro Val Met Ser Arg Ser His Ser Val Val Gln Gln
 130 135 140

Pro Glu Ser Pro Val Tyr Val Gly His Pro Val Ser Val Val Lys Leu
 145 150 155 160

His Gln Ser Pro Val Pro Val Thr Pro Lys Ser Ile Gln Arg Thr His
 165 170 175

Arg Glu Thr Phe Phe Lys Thr Pro Gly Ser Leu Gly Asp Pro Val Leu
 180 185 190

Lys Arg Arg Glu Arg Asn Asn His Glu Thr Pro Ala Arg Pro Arg Gly
 195 200 205

Asp

<210> 165
 <211> 454
 <212> PRT
 <213> Homo sapiens

<400> 165
 Arg His Glu Arg His Glu Tyr Arg Arg Ala Leu Asp His Glu Glu Glu
 1 5 10 15

Ala Leu Ser Ser Gly Ser Val Gln Glu Ala Glu Ala Met Leu Asp Glu
 20 25 30

Pro Gln Glu Gln Ala Glu Gly Ser Leu Thr Val Tyr Val Ile Ser Glu
 35 40 45

His Ser Ser Leu Leu Pro Gln Asp Met Met Ser Tyr Ile Gly Pro Lys
 50 55 60

Arg Thr Ala Val Val Arg Gly Ile Met His Arg Glu Ala Phe Asn Ile
 65 70 75 80

Ile Gly Arg Arg Ile Val Gln Val Ala Gln Ala Met Ser Leu Thr Glu
 85 90 95

Asp Val Leu Ala Ala Ala Leu Ala Asp His Leu Pro Glu Asp Lys Trp
 100 105 110

Ser Ala Glu Lys Arg Arg Pro Leu Lys Ser Ser Leu Gly Tyr Glu Ile
 115 120 125

Thr Phe Ser Leu Leu Asn Pro Asp Pro Lys Ser His Asp Val Tyr Trp
 130 135 140

Asp Ile Glu Gly Ala Val Arg Arg Tyr Val Gln Pro Phe Leu Asn Ala
 145 150 155 160

Leu Gly Ala Ala Gly Asn Phe Ser Val Asp Ser Gln Ile Leu Tyr Tyr

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165										170					175				
Ala	Met	Leu	Gly	Val	Asn	Pro	Arg	Phe	Asp	Ser	Ala	Ser	Ser	Ser	Tyr				
			130					185						190					
Tyr	Leu	Asp	Met	His	Ser	Leu	Pro	His	Val	Ile	Asn	Pro	Val	Glu	Ser				
		195					200					205							
Arg	Leu	Gly	Ser	Ser	Ala	Ala	Ser	Leu	Tyr	Pro	Val	Leu	Asn	Phe	Leu				
	210					215					220								
Leu	Tyr	Val	Pro	Glu	Leu	Ala	His	Ser	Pro	Leu	Tyr	Ile	Gln	Asp	Lys				
225					230					235					240				
Asp	Gly	Ala	Pro	Val	Ala	Thr	Asn	Ala	Phe	His	Ser	Pro	Arg	Trp	Gly				
				245					250					255					
Gly	Ile	Met	Val	Tyr	Asn	Val	Asp	Ser	Lys	Thr	Tyr	Asn	Ala	Ser	Val				
		260						265					270						
Leu	Pro	Val	Arg	Val	Glu	Val	Asp	Met	Val	Arg	Val	Met	Glu	Val	Phe				
		275					280					285							
Leu	Ala	Gln	Leu	Arg	Leu	Leu	Phe	Gly	Ile	Ala	Gln	Pro	Gln	Leu	Pro				
	290					295					300								
Pro	Lys	Cys	Leu	Leu	Ser	Gly	Pro	Thr	Ser	Glu	Gly	Leu	Met	Thr	Trp				
305					310					315					320				
Glu	Leu	Asp	Arg	Leu	Leu	Trp	Ala	Arg	Ser	Val	Glu	Asn	Leu	Ala	Thr				
				325					330					335					
Ala	Thr	Thr	Thr	Leu	Thr	Ser	Leu	Ala	Gln	Leu	Leu	Gly	Lys	Ile	Ser				
			340					345					350						
Asn	Ile	Val	Ile	Lys	Asp	Asp	Val	Ala	Ser	Glu	Val	Tyr	Lys	Ala	Val				
		355					360					365							
Ala	Ala	Val	Gln	Lys	Ser	Ala	Glu	Glu	Leu	Ala	Ser	Gly	His	Leu	Ala				
	370					375					380								
Ser	Ala	Phe	Val	Ala	Ser	Gln	Glu	Ala	Val	Thr	Ser	Ser	Glu	Leu	Ala				
385					390					395					400				
Phe	Phe	Asp	Pro	Ser	Leu	Leu	His	Leu	Leu	Tyr	Phe	Pro	Asp	Asp	Gln				
				405					410					415					
Lys	Phe	Ala	Ile	Tyr	Ile	Pro	Leu	Phe	Leu	Pro	Met	Ala	Val	Pro	Ile				
			420					425					430						
Leu	Leu	Ser	Leu	Val	Lys	Ile	Phe	Leu	Glu	Thr	Arg	Lys	Ser	Trp	Arg				
		435					440					445							
Lys	Pro	Glu	Lys	Thr	Asp														
		450																	

<210> 166

<211> 66

"005498" 01503

<212> PRT

<213> Homo sapiens

<400> 166

Lys Leu Leu Leu Thr Lys Val Glu Gln Lys Leu Glu Leu Ala Arg Leu
 1 5 10 15

Gln Val Asp Thr Ser Gly Ser Lys Glu Phe Gly Thr Ser Gly Ile Pro
 20 25 30

Ala Lys Cys Arg Phe Pro Lys Ile Phe Val Asn Thr Asp Asp Thr Tyr
 35 40 45

Glu Glu Leu His Leu Ile Val Tyr Lys Val Thr Thr Val Phe Leu Pro
 50 55 60

Ala Leu
 65

<210> 167

<211> 79

<212> PRT

<213> Homo sapiens

<400> 167

Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp
 1 5 10 15

Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu
 20 25 30

Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr
 35 40 45

Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile
 50 55 60

Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu Arg Asn Lys Ile
 65 70 75

<210> 168

<211> 209

<212> PRT

<213> Homo sapiens

<400> 168

Gln Leu Pro Leu Trp Pro Ser Pro Ala Ser Val Gln Pro Arg Val Asp
 1 5 10 15

Ser Gln Arg Ala Arg Gly Ser Pro Glu Pro Lys Met Glu Pro Gln Leu
 20 25 30

Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly Trp Leu Ala Leu Leu Leu
 35 40 45

Trp Val Ser Ala Leu Ser Cys Ser Phe Ser Leu Pro Ala Ser Ser Leu
 50 55 60

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Ser Ser Leu Val Pro Gln Val Arg Thr Ser Tyr Asn Phe Gly Arg Thr
65 70 75 80

Phe Leu Gly Leu Asp Lys Cys Asn Ala Cys Ile Gly Thr Ser Ile Cys
85 90 95

Lys Lys Phe Phe Lys Glu Glu Ile Arg Ser Asp Asn Trp Leu Ala Ser
100 105 110

His Leu Gly Leu Pro Pro Asp Ser Leu Leu Ser Tyr Pro Ala Asn Tyr
115 120 125

Ser Asp Asp Ser Lys Ile Trp Arg Pro Val Glu Ile Phe Arg Leu Val
130 135 140

Ser Lys Tyr Gln Asn Glu Ile Ser Asp Arg Lys Ile Cys Ala Ser Ala
145 150 155 160

Ser Ala Pro Lys Thr Cys Ser Ile Glu Arg Val Leu Arg Lys Thr Glu
165 170 175

Arg Phe Gln Lys Trp Leu Gln Ala Lys Arg Leu Thr Pro Asp Leu Val
180 185 190

Gln Asp Cys His Gln Gly Gln Arg Glu Leu Lys Phe Leu Cys Met Leu
195 200 205

Arg

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Leu	Ala	Leu	Leu	Leu	Trp	Val	Ser	Ala	Leu	Ser	Cys	Ser	Phe	Ser	Leu
		20						25					30		

Pro	Ala	Ser	Ser	Leu	Ser	Ser	Leu	Val	Pro	Gln	Val	Arg	Thr	Ser	Tyr
		35					40					45			

Asn	Phe	Gly	Arg	Thr	Phe	Leu	Gly	Leu	Asp	Lys	Cys	Asn	Ala	Cys	Ile
	50					55					60				

Gly	Thr	Ser	Ile	Cys	Lys	Lys	Phe	Phe	Lys	Glu	Glu	Ile	Arg	Ser	Asp
65				70						75					80

Asn	Trp	Leu	Ala	Ser	His	Leu	Gly	Thr	Ala	Ser	Arg	Phe	Pro	Leu	Xaa
				85					90					95	

Ser	Tyr	Pro	Cys	Lys	Leu	Leu	Gln	Met	Ile	Xaa	Lys	Ile	Trp	Xaa	Pro
		100						105					110		

Cys	Gly	Xaa	Leu	Leu	Thr	Gly	Gln	Gln	Xaa	Ser	Asn	Glu	Ile	Ser	Lys
		115					120					125			

Gln	Glu	Ile	Xaa	Cys	Leu	Leu	His	Pro	Pro	Pro	Lys	Asn	Leu	His	Ile
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Asp	Val
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Gly	Pro	Arg	Ala	Arg	Val	Gln	Gly	Phe	Ser	Gly	Ala	Asp	Ile	Val	Lys
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Phe	Met	Ala	Leu	Gly	Ser	Met	Tyr	Leu	Val	Leu	Thr	Leu	Ile	Val	Ala
		20						25					30		

Lys	Val	Leu	Arg	Gly	Ala	Glu	Pro	Cys	Cys	Gly	Pro	Leu	Lys	Asn	Arg
		35					40					45			

Val	Leu	Arg	Pro	Cys	Pro	Leu	Pro	Val	His	Cys	Pro	Leu	Pro	Ile	Pro
	50					55					60				

Ser	Pro	Ala	Glu	Gly	Ile	Pro	Trp	Val	Ala	Tyr	Leu	Pro	Ile	Arg	Trp
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202510 012500 88645001

65

70

75

80

Phe Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr
 85 90 95

Ser

10054988 012502
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